DOCUMENT RESUME

ED 029 084 VT 006 428

New Challenges in Developing High School and Post High School Programs in Agricultural Occupations. Conference Report. Resident Instruction Series No. 5.

New Mexico State Univ., University Park. Coll. of Agriculture and Home Economics.

Pub Date May 65

Note-119p.

EDRS Price MF-$0.50 HC-$6.05

Descriptors-*Agricultural Education, *Agricultural Occupations, *Conference Reports, Cooperative Education, Distributive Education, Federal Legislation, *Occupational Guidance, Post Secondary Education, Program Development, *Program Planning, Secondary Education

A special 2-week conference designed to assist nine participating states in developing plans for new educational programs in agricultural occupations was hosted by the New Mexico State University, July 20-31, 1964. Major papers presented to the 35 participants were: (1) Purpose of the Conference, (2) Where We Have Been--and Where We Are Now, (3) Agricultural Occupations in Vocational Education, (4) National Studies in Agricultural Occupations, (5) Changes in Agricultural Industry, (6) The Role of Distributive Education, (7) Implications for Vocational Curriculum Changes, (8) Guidance and the Classroom Teacher, (9) The Occupational Guidance R-LE OF Agricultural Teachers, (10) Testing, (11) The New Federal Vocational Act as it Affects New Mexico, (12) Plans for New Mexico, (13) Manpower Development Training Act and Labor Outlook for New Mexico, (14) A Proposed Model of Teacher Tasks in Agricultural Occupations Programs, (15) Cooperative Programs in California, (16) Kansas Pilot Programs, and (17) Report of Ohio State University Conference. Reports of the four committees, a vocational agricultural department brochure, and a selected reading list are included in the report. (DM)

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NEW CHALLENGES IN

Developing
High School and Post High School Programs in

AGRICULTURAL OCCUPATIONS.

Conference Report.

A Special Agricultural Education
Conference Report

College of Agriculture and Home Economics.
Department of Agricultural & Extension Education

3 NEW MEXICO STATE UNIV~~ERSITY~~
University Park, ~~New Mexico~~

3a Resident Instruction
Series No. 5.
May, 1965

VT006428

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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- - - FOREWORD - - -

The first challenge for drastically changing programs in agricultural education in 46 years came with the passage of the Vocational Education Act of 1963. New Mexico State University was pleased to accept this challenge for change by hosting a special two week conference designed to assist nine participating states in developing plans for new educational programs in agricultural occupations. Representatives from Minnesota, Kansas, Utah, Wyoming, Oklahoma, Texas, Nevada, California, and New Mexico worked diligently throughout the two week period in formulating plans, ideas and programs, many of which are presented in this special report.

We felt extremely fortunate to have the conference under the capable direction of Dr. Norman K. Hoover, who served as a visiting professor and director for the special two week conference. His previous experience in agricultural occupations made his direction and guidance invaluable.

Special appreciation is extended to Swift and Company of Chicago, the respective state agencies, and NMSU personnel who served as resource persons throughout the conference.

Finally, we are most grateful to Robert White, who served as conference secretary and compiled materials for our final report.

J. D. McComas
Associate Professor & Head
Department of Agricultural &
Extension Education
New Mexico State University

RESOURCE PERSONNEL

Conference Director:

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Conference Coordinator:

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Mr. Roy R. Green	Swift and Company, Chicago, Illinois
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Ivan Million	Teacher of Vocational Agriculture	Thermopolis, Wyoming
Fay Thompson	Teacher of Vocational Agriculture	Powell, Wyoming

New Mexico State University
Department of Agricultural & Extension Education
University Park, New Mexico

NEW CHALLENGES IN DEVELOPING HIGH SCHOOL AND POST HIGH SCHOOL PROGRAMS IN AGRICULTURAL OCCUPATIONS

July 20 to 31, 1964

Theme:

Vocational Guidance and Teaching Programs for Agricultural Occupations

Objectives:

To study the objectives of vocational education in agriculture in terms of the changing agricultural industry and the Vocational Education Act of 1963.

To identify present and emerging agricultural occupations, other than farming and ranching, for which vocational and technical education in agriculture should be available.

To develop an occupational guidance program and a "public relations" program for vocational education in agriculture and determine the role of the teacher of agriculture and guidance counselor in these programs.

To develop teaching procedures and programs to teach about and to prepare individuals for employment in agricultural occupations.

To understand the implications of Federal Legislation (ARA, MDTA, Vocational Education Act of 1963) for area technical school programs and other post-high school programs.

To study in-service, undergraduate and graduate teacher education needs to implement new programs.

The conference objectives will be achieved through presentation by the conference director, Norman K. Hoover, by use of resource persons from New Mexico, by presentations from out-of-state Agricultural Education personnel, by panel or symposium-forums, and through committee reports.

During the first week, the emphasis will be on the present status of emerging programs in various states and orientation to these programs. This will provide the background for the second week's work, "Ways and Means of Implementing New Programs."

The formal work of the conference will be during the forenoon periods, 9:00 a.m. to 12:00 noon. Committee work and field trips will be scheduled during the afternoon periods. Monday afternoon, July 20, will be free for registration and the daily session on July 24 and 31 will end at noon.

TENTATIVE CONFERENCE SCHEDULE

Monday, July 20

9:00 - 9:30 a.m.	Purpose of the Conference and Introductions Dr. James D. McComas, Head, Department of Agricultural Education
9:30 - 9:45 a.m.	Greetings from New Mexico State University Dr. W. B. O'Donnell, Vice President
9:45 - 10:00 a.m.	Conference Orientation Dr. Norman K. Hoover
10:00 - 10:45 a.m.	Objectives of Vocational Education in Agriculture in Terms of the Changing Agricultural Industry and the Vocational Education Act of 1963 Dr. Norman K. Hoover
10:45 - 11:00 a.m.	Break
11:00 - 12:00 noon	Changes in Ag Industry During the Past 10 Years as Related to Number of Farms, Farm Workers, and Agricultural Businesses Dr. Ralph Stucky, Head, Department of Agricultural Economics and Agricultural Business, New Mexico State University
1:30 - 3:30 p.m.	Registration and Housing

Tuesday, July 21

9:00 - 10:15 a.m.	Agricultural Occupations for which Vocational and Technical Education in Agriculture Should be Available Dr. Norman K. Hoover
10:15 - 10:30 a.m.	Break
10:30 - 11:30 a.m.	The Role of Distributive Education in an Agri-Business Program Dr. W. B. Runge, State Supervisor of Distributive Education

11:30 - 12:00 noon	Organization of Committees Dr. Norman K. Hoover

Tuesday, July 21

1:30 - 3:30 p.m.	Committee Work Committee 1 -- Orientation of pre-high school and high school youth, public school personnel, and the lay public to vocational agriculture in 1964 Committee 2 -- Teaching occupational information and providing exploratory work experience for agricultural occupations Committee 3 -- Planning an occupational experience and training program for agricultural occupations Committee 4 -- Developing a high school course of study for agricultural occupations Committee 5 -- Developing out-of-school programs for agricultural occupations

Wednesday, July 22

9:00 - 9:45 a.m.	The Implications of Vocational Curriculum Changes in High School Dr. J. O. L. Saunders, Head, Department of Elementary and Secondary Education, New Mexico State University
9:45 - 10:30 a.m.	The Role of the Classroom Teacher in the Total Guidance Services of a High School Dr. William C. Cross, Head, Department of Guidance and Psychological Services, New Mexico State University
10:30 - 10:45 a.m.	Break
10:45 - 12:00 noon	Presentations by Two Out-of-State Resource Persons on Their Programs as Related to Committee Topics
1:30 - 3:30 p.m.	Committee Work or Tour

Thursday, July 23

9:00 - 10:15 a.m.	The Occupational Guidance Role of Agricultural Teachers Dr. Norman K. Hoover

Thursday, July 23

10:15 - 10:30 a.m.	Break
10:30 - 12:00 noon	Presentations by Three Out-of-State Resource Persons on Their Programs as Related to Committee Topics
1:30 - 3:30 p.m.	Committee Work

Friday, July 24

9:00 - 10:15 a.m.	The Use of Tests to Determine Students' Interests Dr. Norman K. Hoover
10:15 - 10:30 a.m.	Break
10:30 - 12:00 noon	Occupational Experience and Training Programs in Vocational Agriculture Dr. Norman K. Hoover and panel of out-of-state resource persons

Monday, July 27

9:00 - 9:45 a.m.	Teaching "about" and "for" Agricultural Occupations Dr. Norman K. Hoover
9:45 - 12:00 noon	Committee Progress Reports
1:30 - 3:30 p.m.	Committee Work

Tuesday, July 28

8:00 - 10:00 a.m.	Committee Work
10:00 - 10:15 a.m.	Break
10:15 - 11:00 a.m.	Vocational and Technical Education under the New Federal Vocational Act in High Schools and Area Technical Schools Dr. M.G. Hunt, State Director of Vocational Education
11:00 - 12:00 noon	The Implications of Recent Federal Legislation for Vocational and Technical Education in Agriculture Mr. L.C. Dalton, State Supervisor of Agricultural Education
1:30 - 3:30 p.m.	Committee Work

Wednesday, July 29

9:00 - 10:00 a.m.	Employment Outlook and BES as Related to Vocational and Technical Education Mr. Max R. Salazar, Employment Security Commission
10:00 - 10:15 a.m.	Break
10:15 - 12:00 noon	Training Personnel for the Livestock and Meat Industry Mr. Roy R. Green, Swift and Company, with panel of local persons
1:30 - 3:30 p.m.	Committee Work or Tour

Thursday, July 30

9:00 - 11:00 a.m.	Final Reports and Discussions by Committees 1, 2 and 3
11:00 - 11:15 a.m.	Break
11:15 - 12:00 noon	Undergraduate and In-service Education Needs to Implement New Programs Dr. James D. McComas, Mr. L.C. Dalton and resource persons
1:30 - 3:30 p.m.	Committee Work, Tour of Public School or Tour of an Agricultural Business

Friday, July 31

9:00 - 10:45 a.m.	Final Reports and Discussion by Committees 4 and 5
10:45 - 11:00 a.m.	Break
11:00 - 12:00 noon	Conference Summary Dr. James D. McComas and Dr. Norman K. Hoover

PURPOSE OF THE CONFERENCE

Dr. N. K. Hoover, Conference Director

"Vocational Guidance and Teaching Programs for Agricultural Occupations" was the conference theme for a group of agricultural teachers in New Mexico and eight other participating states. The conference was held to meet new challenges for high school and post-high school programs in agricultural occupations made possible by the Vocational Education Act of 1963. Section 10 of the Act states:

> "Any amounts allotted under such titles, Act, or Acts for Agriculture may be used for vocational education in any occupation involving knowledge and skills in agricultural subjects, whether or not such occupation involves work of the farm or of the farm home, and such education may be provided without directed or supervised practice on a farm."

As a result of the specific wording and intent of the new Vocational Education Act, the pattern for programs in vocational agriculture will change. Forward-looking teacher of agriculture in several states have laid considerable groundwork in developing pilot programs to provide vocational guidance in agriculture and to study for agricultural occupations.

The objectives of the conference were stated at the beginning as follows:

1. To study the objectives of vocational education in agriculture in terms of the changing agricultural industry and the Vocational Education Act of 1963.
2. To identify present and emerging agricultural occupations, other than farming and ranching, for which vocational and technical education in agriculture should be available.

3. To develop an occupational guidance program and a "public relations" program for vocational education in agriculture and determine the role of the teacher of agriculture and guidance counselor in these programs.
4. To develop teaching procedures and programs to teach about and to prepare individuals for employment in agricultural occupations.
5. To understand the implications of Federal legislation for area technical school programs and other post-high school programs.
6. To study in-service, undergraduate and graduate teacher education needs to implement new programs.

The conference objectives were achieved through utilizing the many experiences of the conference participatns, presentations by the conference director, Norman K. Hoover, use of resource persons and committee reports.

Because there were persons in attendance from nine states, a general approach was made by committees as the several committees developed their reports. These reports will serve as guidelines for each state as specific programs are developed.

Most of the persons attending the conference had already developed some phase of a program for teaching about and for agricultural occupations. For this reason, no time was wasted in lengthy discussions on the "why" of such programs. We were able from the beginning to devote full time to "what should be done" and "how to do it." This type of constructive thinking was characteristic of the group; therefore, a great deal was accomplished in the exchange of ideas and experiences and in the development of recommended action programs.

WHERE WE HAVE BEEN--AND WHERE WE ARE NOW!

Since the passage of the first Federal legislation in 1917 creating vocational agriculture as it is now known, there has been but one purpose--to train present and prospective farmers. This task has been accomplished admirably as the efficiency of our nation's farmers testifies. There have been cycles in amount of public support for vocational agriculture, as has been true for all educational programs. Throughout these approximately 47 years vocational agriculture teachers and administration have, with varying degrees of success, developed several supporting programs to the traditional high-school all-day program. Adult farmer and young farmer educational programs, and certainly the Future Farmers of America have all become accepted methods of supporting high school programs of vocational agriculture.

There has been considerable feeling that undue emphasis was being placed upon vocational agriculture in view that of a total U. S. employment of 68 million, only 7 million are employed on farms.

Since 1963, vocational agriculture educators were confronted with the charge of being responsible with at least a major portion of the education of the additional 16 million persons in off-farm agriculture. These 6 million persons engaged in services to farms and the 10 million persons engaged in processing, handling and storing of farm products must also have education and training in dimensions of agriculture in order to be employable.[1]

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[1] Dr. H. Ralph Stucky, Talk presented to conference, July 21, 1964.

The change from 7 million in farming to the 23 million in all phases of agriculture changes the traditional role of vocational agriculture. No longer is the total or single emphasis to be placed upon training persons solely for the purpose of farming.

From the recent Vocational Education Act evolves the primary objective of vocational education in agriculture: To train for gainful employment in agriculture.

This objective was further sub-divided by conference participants into the following items:

1. To train for gainful employment in agricultural subjects for those planning to engage in, or already engaged in farming or ranching.
2. To develop competencies in agricultural subjects for those planning to engage in, or already engaged in occupations other than farming or ranching that require knowledge or skills in agriculture.
3. To develop competencies in agricultural subjects for those who plan careers in fields of agriculture requiring college or other continuing education.
4. To provide exploratory experiences of an educational and vocational guidance nature in agriculture prior to and during enrollment in the high school and adult phases of the vocational agriculture program.
5. To develop leadership and civic responsibility through participation in group activities of specific youth and adult organizations.
6. To develop desirable personality traits, attitudes, and human relations skills required for success in an agricultural occupation.

Fortunately, farsighted instructors have developed pilot programs in many of the states. These have been developed without Federal funds or support, but provide the basis for valuable experience which will be needed as vocational agriculture changes from the traditional to new concepts in educating students. These programs have ranged from the exploratory, whereby students are introduced to possibilities in agriculture; to work experience programs which provide students with employable skills. Many of the participants of this conference were such persons.

AGRICULTURAL OCCUPATIONS IN VOCATIONAL EDUCATION

Dr. Norman K. Hoover

The Vocational Educational Act of 1963 provides that there shall be education for occupations which require knowledge and skills of agriculture, whether or not such occupations involve work on the farm.

The forty per cent of the work force which works with or is involved in an agricultural product includes everyone from the steel workers who make the fence used in agriculture to the checker working at the supermarket cash register. Even though the work of these persons is related to agriculture, and in some measure is dependent of agriculture, not all of this forty per cent need training or knowledge in agriculture. The steelworker certainly needs no knowledge, but the person who sells the steel fencing to the farmer must be able to advise the farmer. The checker at the supermarket need not know anything about agriculture, but the crew boss of the produce harvest crew does have to know agriculture, at least some production practices used in growing vegetables.

Along with the ten per cent of the labor force on farms, we then have from five to seven per cent of the labor force concerned with services and supplies to the farmers who must also understand agriculture. At the other end of the scale, there is four to six per cent of the labor force associated with harvesting, marketing, processing, and storing of farm products that must also be more than casually acquainted with agriculture and the problems of the farmers.

Using these very realistic figures, vocational agriculture education then should provide for twenty to twenty-four per cent of the total labor force and provide the replacements for this portion of the labor force. The training which would be needed by these persons closely associated with farming may not be purely vocational agriculture as we have known it. At least part of this training may be distributive education, or trades and industry types of education. In some instances, the responsibility may be shared between vocational agriculture and the distributive education programs to accomodate students' requirements. In other situations, it may be necessary for the vocational agriculture teacher to provide additional educational training for the student. Much of the teaching will still be dealing with production agricultural subject matter but will be oriented to off-farm agricultural occupations.

NATIONAL STUDIES IN AGRICULTURAL OCCUPATIONS

One of the first studies in agricultural occupations as it is now known, was in 1953. A doctoral candidate at the Pennsylvania State University used this topic as the basis for a problem and implemented a study regarding changes needed in vocational agriculture. Pennsylvania then initiated a pilot program in agricultural occupations in March, 1954. California was also pioneering about this same time and conducted a staff study in 1955 relative to agri-business needs. During the 1957-58 school year, the Penn State developed the first known formal effort in this area, by offering a summer course in Occupational Guidance in Agriculture. This course was offered for two summers, then discontinued for three years for lack of interest. It was re-instated in 1962 and has been quite popular since that time.

At the time of this conference, a majority of the states had embarked upon studies of agricultural occupations. A smaller, but significant number had developed formal course offering to prepare teachers and pilot program were being implemented at local levels.

CHANGES IN AGRICULTURAL INDUSTRY

Dr. H. Ralph Stucky, Head
Department of Agricultural Economics
and Agricultural Business
New Mexico State University

There has been a trend for the percentage of farmers to decrease as the total population increases. This trend will continue in the future, but the decrease in numbers of farmers will not be as rapid as in the past decade. It is expected that the numbers of persons closely allied with farms will not decrease.

Presently, all U. S. employment, 68 million persons are employed. There are 7 million employed on farms, 6 million involved in services to farms, and 10 million are involved in the handling, processing, and storing of farm products. This total of 23 million is approximately 1/3 of the total U.S. employment, hence, the importance of agriculture education and training for persons presently involved with or entering these agricultural fields is still strikingly significant.

As there are fewer people on the farms, there will necessarily be more people in related businesses.

THE ROLE OF DISTRIBUTIVE EDUCATION

Dr. William B. Runge
State Supervisor of Distributive Education
and Professor of Education
University of New Mexico
Albuquerque, New Mexico

The name for distributive education comes from the area of marketing and distribution. The usual role of distributive education has been at the retail level, although it is not exclusively limited to that area. D. E., as it is commonly called, is normally located in the high schools of the larger towns and cities, and for this reason, is not always found in rural communities where vocational agriculture is taught. The coordinators, as teachers are called, teach by the conference method, using a store model "set-up." In this type of program the student is usually placed on the job for a minimum of fifteen hours per week and is concurrently studying materials closely related to his or her job. Coordinators usually utilize a common core of material two or three days a week and then have the students study in individual workbooks for two or three days a week. The distributive education coordinators make available individual workbooks and curriculum guides for students in a wide range of subject-matter. There are study guides for each type of work.

This procedure suggests that distributive education programs likely have available materials which might be used by vocational agriculture teachers, should they embark on this type of program. It is felt that primary consideration should be to worry more about helping students, not worry as to which vocational division assists them.

Three possibilities presented for the consideration of the conference participants included:

1. Students would start with, and study vocational agriculture for two years, then they would shift to distributive education for retailing skills and work placement.
2. Vocational Agriculture would keep the students, but use distributive education facilities for curriculum and for knowledge of placement and supervision skills.
3. A complete vocational agriculture program with a different preparation for agriculture teachers being involved in cooperative education programs.

   Needed would be such courses as:

   a. Marketing, distribution of consumer goods and business administration.
   b. How to organize and operate cooperative programs.

IMPLICATIONS FOR VOCATIONAL CURRICULUM CHANGES

Dr. Jack O. L. Saunders, Head
Department of Elementary & Secondary Education
New Mexico State University

In the 1930's vocational agriculture was required of nearly every boy and home economics was required of every girl in many rural communities. This requirement created scheduling difficulties in many schools, because of the double periods, but at this time this was a necessary difficulty. Vocational agriculture fulfilled an important need in many rural communities in the 1930's and 1940's. Vocational education agreements signed by many schools with the division of vocational education meant extra money to assist schools securing an extra faculty member. Subsequently, the money decreased because of extra departments being added, and these monies would buy only a half-time and then a quarter-time faculty member. Although trades and industry, distributive education and other programs existed, vocational education in the West has mostly meant vocational agriculture and home economics, as these have met many of the needs of the people of this region.

As times have affected change from a rural to an urban society, the emphasis also must change. In 1957 there was a major emphasis on science and mathematics. At this time society was concerned with the intellecturally elite, and the importance of manipulative skill was minimized. We were ignoring the several kinds of intelligence, even though Thurstone's evidence was quite clear.

Experiences and values should govern the learning process as we attempt to teach teachers how to design presentation organizations which facilitate learning. The learner controls learning regardless of what we would like to think, and we can only facilitate this learning. We must face up to the inevitability of change regardless of how painful it may be. This change does not mean the discarding of vocational agriculture. Here are the leaders for the leadership into the inevitable curricular change. Vocational agriculture has the real experience to afford the direction vocational education will take as it changes.

Decisions must be reached regarding the direction that vocational education must take as changes occur. Much has been said regarding comprehensive high schools versus vocational high schools, but certain factors must be taken into consideration. The stigmas, the expense, and the isolation are all important factos to be considered. For these, if no other, probably the comprehensive high school will remain most important in vocational education.

Certain teaching values are important and we must not lose sight of these. Vocational education can probably teach best these values which are:

1. The worth of work.
2. The worth of creating.
3. The respect of human endeavor whatever it may be.
4. The value of continuous learning.

Our objectives do change, and as they change, so will our programs. We should use the experience and knowledge which we have gained, not merely discard it as a curriculum is changed. The curriculum must continue to implement in schools needs which we can recognize, and all teachers must continually do critical thinking.

GUIDANCE AND THE CLASSROOM TEACHER

Dr. Wm. C. Cross, Head
Department of Guidance & Psychological Services
New Mexico State University

Counseling is a face-to-face situation whereby one endeavors to help the student change his self-concept, and adjust to his problems. Guidance then is a system of services to students in such areas as health, remedial reading, and identifying personal problems.

The purpose of guidance is to help people achieve at their best possible level. Too often we assume that the work of the world is done by those with professional degrees. This is not true. We need to give students more realistic goals. Interest is a primary requisite for endeavor, and if the student does not perceive a realistic goal then he will lose interest. A study in New York indicates that I. Q.'s are not fixed, but that the students can change their I. Q.'s, at least in terms of measurement.

There are now approximately 190 million people in the United States. It is predicted that by 1967, there will be over 200 million, and by the year 2010, over 400 million. More guidance and counseling will be needed to help students adjust to and find their places in this increasingly complex world.

Children have an urge at the 4th, 5th, and 6th grade levels to know more about the world of work and what they are going to do in life. A high school education will continue to be terminal education for many, and we must be able to help them to be employable by the time they complete high school. As a result of the increase in the amount of counseling and guidance needed, it will be increasingly necessary for the classroom teacher to assist with this important function. Each person must value what he does and be proud of himself.

The classroom teacher can help the student to learn how to study, to develop reading ability and to relate subject matter to occupations. In vocational agriculture there is a direct possibility to explore occupational opportunities.

THE OCCUPATIONAL GUIDANCE ROLE OF AGRICULTURAL TEACHERS

Dr. Norman K. Hoover

The major emphasis of vocational agriculture has changed throughout the years as follows:

In 1917 - The goal was training boys for entrance into farming.

In 1964 - The goal is preparation of youth for entrance in all occupations in agriculture in which there are employment opportunities.

In 1917 - There was little need for vocational guidance.

In 1964 - 1. There is a high degree of specialization.
2. There is a need for increased guidance in high school.

Student's interest as a motivating factor should not be overlooked. Virtually all agriculture teachers have had the experience of having a freshman boy (normally being a good student) who says that he wants to be a farmer. The fact is, this boy has an occupational goal and is working toward that goal. By the time this boy becomes a senior, however, he may become a "trouble maker" simply because he has lost that goal as he becomes aware of the difficulties of entering farming. Since we have an increasing number of off-farm jobs available, we should help the student to become aware of these possibilities and help him to find a realistic goal.

There are several important reasons for ag. college bound students taking vocational agriculture in high school.

1. It will help students keep an interest in agriculture and occupational goals before them.
2. No where else is there any chance for a student to learn the important agricultural manipulative skills.

In many of today's high schools as many as nine out of ten people in the school may be totally unfamiliar with agriculture. Guidance personnel in the school, if indeed the school has someone with available time for guidance functions, probably is not aware of the job opportunities in agriculture.

Vocational agriculture instructors in their new role have several responsibilities which are:

1. Provide new material on agricultural occupations to the guidance personnel in the form of occupational briefs.
2. Acquaint the guidance counselor with opportunities which we have to counsel boys. Don't replace but offer to assist the guidance counselor.

It is important to remember to seek assistance from guidance personnel, not expect them to seek ways they can help us.

Provide Guidance Early

When should occupational guidance begin? Since many boys make a tenative choice at the age of ten to fourteen, it is important that occupational guidance begin as early as possible. Recognizing the need for early guidance services, many schools are now beginning to utilize junior high school counselors. Pennsylvania State University has developed an Agricultural Interest Inventory which has been validated on eighth grade boys. It might be utilized as part of a battery of tests given to eighth grade students, and then used as a basis for counseling with students prior to ninth grade enrollment. There may be others which would be useful in this manner.

A guide for teaching a unit on occupational information has been developed and is a part of a publication entitled "An Introduction to Agricultural Business and Industry". This publication, along with a Teacher's Guide is available from the Interstate Printers and Publishers, Danville, Illinois.

The teacher wanting to include a unit on occupational information should be certain to notify the guidance counselor and the administration of his intention, as well as provide them with the reasons for including such a unit.

TESTING

Dr. Norman K. Hoover

Since the goal of vocational agriculture has changed, it may be time for the teachers of vocational agriculture to change their methods. There may have been a time when the teacher could easily determine if the student was a person who should be in a vocational agriculture course. With the wide variety of agricultural related occupations today, this may not be such a simple task. Certainly no one criterion, such as whether or not the student resides on a farm, can determine the interest of the student.

Perhaps a refinement of the teacher's methods, such as the utilization of testing of the student's interests, should become an important part of the total vocational agricultural program. There are many pitfalls in testing, one of the easiest is the tendency of the teacher to base a decision on a test score alone. If used widely, however, the use of some type of test to determine the student's aptitude and interest could be a valuable tool.

The Pennsylvania Vo-Ag Interest Inventory Test has been developed to serve this purpose. [illegible] This is an interest test which has been validated on the success of boys in vocational agriculture in Pennsylvania, and is very useful in determining which boys should be enrolled in vocational agriculture. The test is short, rather inexpensive, and rather simple to administer. There is an excellent opportunity for many teachers to have this included with tests normally administered to the eighth grade students. It could easily be scored by the vocational agriculture teacher and provide valuable counseling information for the teacher to use with the student and the student's parents.

The Pennsylvania Vo-Ag Interest Inventory test is available from the Interstate Printers and Publishers, Danville, Illinois, at the following prices:

Test Booklet, package of 20	$1.25
Answer Sheet, package of 20 with one (1) summary form	.75
Teacher's Manual	.25
Scoring Key	.10
Specimen Set (one of each of above items)	1.00

THE NEW FEDERAL VOCATIONAL ACT AS IT AFFECTS NEW MEXICO

Dr. M. G. Hunt
State Director of Vocational Education
Santa Fe, New Mexico

Change is a dominant factor in education patterns. The Vocational Education Act of 1963 indicates that the public feels that more changes are necessary. Of the 40 per cent of the students who enter college, only 20 per cent ever finish. This remaining 80 per cent of the persons must make up the world of work, in an age when automation and other factors call for more education than ever before.

At the present time, there are two million unemployed and yet there are one million jobs which are unfilled because no one has been trained to fill them.

The thinking in New Mexico has not been to divide our educational plan into academic systems and vocational systems. This would tend to destroy the American dream of allowing everyone to go as far as his abilities permit in a setting where education is provided in a central manner.

The time has come when we may have to change our program in order to meet the educational demand. We must cross over some established lines which have been recognized in the past. No longer can we say that this student is the sole responsibility of Vocational Agriculture or Distributive Education or some other field. What may be necessary will be a shared program which will result in the direct goal of making youths employable. Any means toward this end should be used. Included in our responsibility will be the 35 per cent to 40 per cent of youths who do not complete high school.

These factors stand out in the present situation:

1. We need accurate information about the needs of the labor market.
2. There is presently an inadequate supply of trained teachers in

vocational education.

3. Present patterns and ideas in vocational education may need to be changed.
4. Will the training provided result in making youth employable ?

PLANS FOR NEW MEXICO

Mr. L. C. Dalton
State Supervisor of Agricultural Education
University Park, New Mexico

The present plans for the inclusion of the agricultural occupations phase of vocational agriculture in New Mexico are primarily for the high school student. The State Office of Vocational Agriculture is thinking in terms of a separate program on the basis that it may be difficult to meet two objectives at the same time. It is proposed that we maintain the existing program, and the agricultural occupations would be organized with separate teachers, curriculum, etc. Since there are quite a few available positions for people in the agricultural occupations, this would justify the terminal training of students for these positions. Due to the geographical features of New Mexico, these programs could only be initiated where a sufficient number of related training stations could be found.

The high school program would be similar to this outline: Junior high school level--exploratory courses in occupations. High school level:

A. First year - one period with 100 hours work experience on the farm, or occupation outside of school time. Typical units taught would include crops, livestock, farm mechanics, leadership and work experience.

B. Second year - one period of school time with 200 hours of work experience required.

Typical units would include crops, livestock, soil and water management, farm management, farm mechanics, leadership and work experience.

C. Third year - three hours of school time with 300 hours of work experience required. This would be primarily seniors because of present New Mexico Labor Laws. This year would be organized for three months preparation for the job, then followed by six months job placement for work experience. Typical units taught during this three month period would include information on the jobs; salesmanship and merchandising; accounting; business management; credit and financing; and solving personal problems.

Beyond high school,short courses in New Mexico could be organized along the lines of adult and night courses. Logical topics for the organization of such courses include:

1. Dairy plant management and operation.
2. Farm equipment sales and maintenance.
3. Feed store skills and management.
4. Competencies needed for nursery and landscaping work.

Two year training beyond the high school level may be feasible. This training would include work experience, be a terminal program, and possibly offer such as an associate degree. Some of the possible areas for training in New Mexico would be:

1. Farm management
2. Feed mix plant managers
3. Agricultural chemicals and fertilizers
4. Farm equipment

Each of the above would necessarily be a separate course, and would have the following distribution of importance in the curriculum.

Suggested Curriculum:

1. General Education-20% to 30% of the time
    a. Communicative skills
    b. Social science, economics and human relations
2. Mathematics and Science-10% to 20% of the time
    a. Basic
    b. Applied
3. Agricultural Business-10% to 20%
    a. Marketing
    b. Accounting
    c. Economics
4. Technical Agriculture-30% to 40%
    a. Special areas

MANPOWER DEVELOPMENT TRAINING ACT AND LABOR OUTLOOK FOR NEW MEXICO

Mr. Max Salazar, Deputy Director
Employment Security Commission

Traditionally, the economy of New Mexico was based upon mining and agriculture. Mining has managed to hold it's own, but mechanization, intensive farming and other factors have resulted in migration of many rural-born to urban areas. In 1950 there were approximately 38,000 persons employed in agriculture in New Mexico. By 1960, this number had decreased more than 45 per cent. The number of farmers, farm managers, and farm laborers represented 18 per cent of total employment in 1950, but by 1960, the percentage had decreased to less than 7 per cent. This category of farmers, farm managers, and farm laborers can be expected to decline until they will comprise about 4 per cent of 1970. During this time the white collar occupations will increase their portion of total employment to almost 50 per cent by 1970.

An analysis of current labor market trends reveals that there is a declining need for lesser-skilled and lesser educated workers. The labor force is being inflated each year with more inexperienced youth than at any time in the past.

For the past ten years or so, the employment security commission has repeatedly called attention to the need for more vocational training in our public schools. Not only more, but better training has been needed where young people expressed interest or had special aptitudes for this kind of training.

In 1962, Congress passed the Area Redevelopment Act, and in 1963 the Man-Power Development and Training Act which is a vocational training act.

Since these Acts were passed, the State Employment Service in New Mexico and the State Department of Vocational Education have trained 1,019 persons in 19 different occupations. On completion of training, 83 per cent of the total were placed in training related jobs. We have only scratched the surface. Much more training is needed. Action is needed by the State prior to July, 1965, or this chance will be lost.

Vocational training will help in the job of placing young persons unemployed because of automation. Experts predict that young people entering the labor market now can expect to make an average of four major changes in their occupations during their working lifetime. This means that training and re-training will probably be with us in all future manpower management.

Unemployment is a social as well as an economic problem which must be resolved, for the good of the country.

(Article submitted to Agricultural Education Magazine in June of 1964)

A PROPOSED MODEL OF TEACHER TASKS IN AGRICULTURAL OCCUPATIONS PROGRAMS

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A proposed approach in structuring a program of agricultural occupations is to examine a schematic model of tasks which the teacher might be expected to perform in implementing such a program. Figure I is a proposed model suggested as a possible approach in making such an analysis.

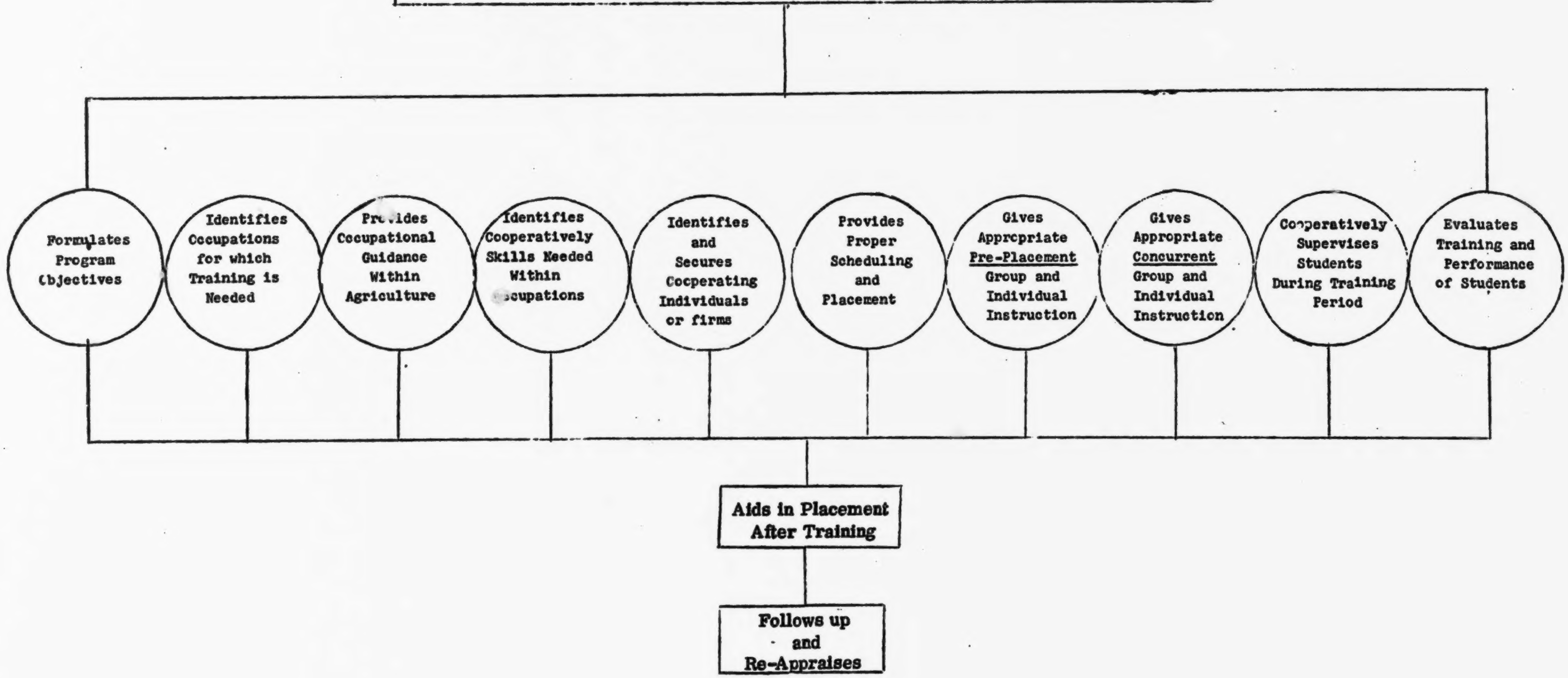
Task Number One: The teacher formulates program objectives. This task is presupposed to supercede all other tasks. Defined in general terms, program objectives then may serve as a frame of reference or focal point for identifying subsequent specific major tasks to be accomplished. Objectives should relate directly to the vocational goals of the educational program being designed.

Task Number Two: The teacher identifies occupations for which education and training are needed. Prevailing opportunities for future employment on a local, area and state basis will appreciably delimit those occupations which may be included within the local program. Experience stations for supervised on-the-job education and training which are available near the school will also limit the parameter of the program.

Task Number Three: The teacher provides occupational guidance within agriculture. A number of persons, materials and resources must be utilized in this task. Personnel from the local school guidance program should occupy a key role in aiding the teacher. Talks by persons actively engaged in agricultural

FIGURE I

A PROPOSED MODEL OF TEACHER TASKS IN AGRICULTURAL OCCUPATIONS PROGRAM


Formulates Program Objectives
Identifies Occupations for which Training is Needed
Provides Occupational Guidance Within Agriculture
Identifies Cooperatively Skills Needed Within Occupations
Identifies and Secures Cooperating Individuals or firms
Provides Proper Scheduling and Placement
Gives Appropriate Pre-Placement Group and Individual Instruction
Gives Appropriate Concurrent Group and Individual Instruction
Cooperatively Supervises Students During Training Period
Evaluates Training and Performance of Students
Aids in Placement After Training
Follows up and Re-Appraises

occupations will augment the teacher's efforts. The nature of this task and the participation of students should be pursued with exploration and orientation as primary goals.

Task Number Four: The teacher cooperatively identifies skills and experiences necessary for each occupation. The degree to which the teacher and significant others are able to accurately identify needed skills and experience will have much impact upon the program's success or failure; for these facets represent the quantity of the program. The teacher must assume a major responsibility in seeking to identify all desirable skills and experiences to be attained; not exclusively those which may be limited to either the bias or experience of selected cooperators.

Task Number Five: The teacher identifies and secures cooperating individuals or firms. A number of factors are concomitant in realizing this task. Cooperating firms, agencies or individuals must understand and be sympathetic to the objectives of the program. A primal consideration must be in educating and providing skills which will make students employable upon completion of the program. Personalities and habits of those aiding directly in on-the-job supervision of students must be considered. Occupations which may be at least reasonably mastered within the duration of the program must be selected.

Task Number Six: The teacher aids in the proper scheduling of the experience program and secures proper placement. The performance of this task will be circumscribed by the administrative organization within the respective local school. In most programs, the teacher will likely be responsible for scheduling and placing students at selected experience stations in an agricultural occupation. Larger schools may have a coordinator of all placement programs who assumes a major role in providing this function. However, in either case, the role of the teacher is not diminutive; for it is likely that he is best acquainted with the personalities, abilities and interests of students.

Task Number Seven: The teacher gives appropriate pre-placement group and individual instruction. Here the teacher is obligated to give an appropriate orientation for specific occupations. This may be augmented by bringing experienced persons within selected occupations to the classroom. Knowledge and skills anticedent to placement should be presented. Field trips to the place of the agricultural occupation should also be considered in developing the program of instruction.

Task Number Eight: The teacher gives appropriate concurrent group and individual instruction. It is anticipated that much instruction at this stage will be pursued on an individual basis; however, it is also possible that periodically the teacher may wish students placed for experience to report to the classroom for special supplementary instruction; and/or an evaluation of the experiences gained to date. This task also demands that the teacher closely coordinate his efforts with the cooperator of the selected business.

Task Number Nine: The teacher supervises students during the period of education and training. This task implies that the teacher will make periodic visits to the experience station to ascertain the progress of the student and the kind and quality of experiences he is receiving. Here, supervision assumes a dual participating role involving the teacher and the local business cooperator. Care must be exercised to carefully coordinate efforts so that suggestions, teaching and directions offered by the teacher and the cooperator will be congruent.

Task Number Ten: The teacher evaluates the training, educational experiences and the performances of students. Teacher and cooperator observations and records and reports of students should provide criteria to aid in the evaluation process. It may be desirable to conduct joint meetings of participating experience station cooperators to discuss any needed changes in the existing placement phase of the program. Student attitudes and oral reports concerning their placement for experience should also be considered.

Tasks Number Eleven and Twelve: The teacher aids in the job placement after the training period ends to insure that the vocational goals of the student and the program are accomplished. Additionally, he follows up the student after employment to reappraise the educational and training aspects of the program of agricultural occupations. Coordination and communication of the program is assumed to accompany the achievement of all tasks. Finally, it is suggested that an analysis of the model presented, or a similar one, posits a structure for developing a sequential instructional program in agricultural occupations.

COOPERATIVE PROGRAMS IN CALIFORNIA

Dr. E. M. Juergenson
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University of California
Davis, California

Interpretation of the provisions of the Vocational Act of 1963 emphasizes two major points which are:

1. Any vocational program must provide persons with marketable skills.
2. There will be little or no divisions between services as there has been in the past. Responsibility must be shared more appropriately between the various vocational divisions.

The program now being offered in the Modesto City Schools, Modesto, California, was cited. In this city, students have availalble in the community the opportunity to continue their education after the 12th grade. In one study sixty-six per cent of the students actually terminated their formal education with high school. In the high school, about two thirds of the students persued a college preparatory curriculum, but of these, forty-eight per cent failed to enter any institution of higher education. As a result of studies such as these, the Modesto City Schools employed a person as a work experience supervisor, and instigated a program of providing work experience for the students. The Modesto system provides three types of work experience:

A. Exploratory - designed to aid the student in his or her choice of career. The student receives no pay, only credit. The student is supervised and has a variety of experiences throughout the school year. The time for this activity is made available during the school day.

B. General - this is similar to the exploratory, with major difference being that the student works at one job over a period of weeks, generally not less than twelve weeks, and receives at least the legal minimum wage for the work he or she performs. This also is designed to provide meaningful learning experiences.

C. Vocational - the student receives both pay and credit as in the general course. The student in vocational work experience education is placed in a part-time job in the occupation of his choice for which he is simultaneously making preparation in his high school classes. The five areas of this program as provided by the Modesto City Schools are vocational agriculture, distributive education, office education, trade and industrial occupations, and diversified occupations.

Another program cited was in a California community of approximately 8,000 people, in which eighty per cent of the income was off-farm and which was not considered a good agricultural area. The instructor there places eighteen boys annually for supervised work experiences in such places as Forest Service, Highway Maintenance, Service Firms, and farms.

Money was provided for a survey of the community and every agricultural related business was interviewed by an interviewer. Some of the results of this study are:

Of the sixty farmers in that area, fifty-four would be willing to employ students for supervised work experience, and of the thirteen related firms all would be willing to cooperate. These persons indicated that they welcomed and usually preferred supervision, and almost all would be willing to pay students by the hour. Although the survey indicated that pre-employment training was necessarily desired, the persons did want the boys to have certain skills and abilities which could probably best be provided by pre-employment or simultaneous training.

KANSAS PILOT PROGRAMS

Layle Lawrence and Don W. Brock

In the process of evolution in vocational agriculture from the traditional role of preparing boys to become farmers, to what might be reasonably predicted for the future, it is inevitable that there would be pioneers in the field. Many of the participants of the conference have conducted pilot programs of one type or another. Such pilot programs are important since any new type of educational program must have some basis for development. Pilot programs can be invaluable for the experience they represent. Two such programs have been organized in Kansas which to date have been relatively successful.

Layle Lawrence of Medicine Lodge, Kansas, developed a supervised work experience program. This course was offered to seniors in vocational agriculture. A single semester course was organized on a schedule of 3 to 4 weeks in the classroom, 11 to 12 weeks of work experience without pay, and the last 3 weeks in the classroom again.

The first 3 to 4 weeks in the classroom was devoted to a knowledge of the world of work and a self-evaluation for each student. Following this initial period, the student then selects two different occupations and following study about those occupations arranges for work experience.

The student must work at least twenty hours with each of these two employers, and it is necessary that the student make his own arrangement regarding time and other details. There is not pay involved and the student is required to submit written reports of each job and the employer submits an evaluation of the student.

During the last three weeks of the semester, students are back in the classroom for a general summarization of what has been learned. Along with this, other units are taught which will better enable the student to take his place in the world of work. Such units as military obligations, money management, job interview procedures, and other pertinent subjects are included.

According to Lawrence, most of the students who have participated in this program go on to college to prepare for definite occupations.

Another successful pilot program was established by Brock of Topeka, Kansas. The school where this program was established has approximately 1,000 students and is in an area which has gradually become urban within the last fifteen years. The need was felt for a program to foster interest in agricultural occupations. A program was started which was termed "Vocational Cooperative Part-time Training Program." Although this was not designed as a terminal program, but to also attract college bound boys, similar programs could either be terminal or a combination of terminal and preparatory.

To organize the program, the teacher of vocational agriculture discussed the program with the principal, director of instruction, and the vocational supervisor. With their approval, he then began to locate cooperating businesses, and located the training stations prior to August.

In the Topeka program, the student must first complete an exploratory course in vocational agriculture, and then as a senior (for reasons within the Labor Laws of that State) signs up for the course. Students divide their time between the classroom and the job. The first of the two hours class period, the emphasis is on supervised study for individuals (or on related information) using questions and answer type booklets. During the second hour students have individual study, using distributive education type material on occupational relations.

The responsibility for applying for the job and arranging working hours is the responsibility of the boys. They must work a minimum of fifteen hours a week and receive pay for their work. It is expected that in the 1964 school year that the program will be expanded slightly.

The greatest problem encountered in programs of the types mentioned was the difficulty in securing adequate individual study guides. Some of the materials had to be individually written by the teachers to fit the situation. Other distributive education materials have been found to be at least partially applicable. The greatest success has been experienced by writing the distributive education supervisors in different States for copies of materials used in their programs.

REPORT OF OHIO STATE UNIVERSITY CONFERENCE

Mr. L. C. Dalton
State Supervisor of Agricultural Education
University Park, New Mexico

Conclusions reached at the Ohio Conference were that the education for agricultural occupations could be met in the following types of formal education:

1. High School courses in agricultural occupations.
2. Short intensive courses for students beyond the high school level.
3. A two year program for students beyond the high school level. This would be on the 13th and 14th year level and offer as associate degree or a certificate.
4. Professional courses.

Some of the guidelines for organization and operation of training in Agricultural Occupations reached by the Ohio Conference were:

1. Exploratory classes in junior high school.
2. Enough occupational opportunities must be availalble.
3. There must be enough interested students.
4. Must have job information on the competencies needed.
5. The training must meet the needs of students.
6. There should be an advisory committee to assist in planning and evaluation.
7. This training should be set up as a separate course of study.
8. There should be cooperative basis signed agreements.
9. Students should be placed on the job that they expect to be trained for full-time work.
10. The selection of students should be based on the student's interest

and abilities.

11. There should be placement and follow-up by the school.

12. There must be continuous evaluation of the program.

ORIENTATION OF PRE-HIGH SCHOOL AND HIGH SCHOOL YOUTH, PUBLIC SCHOOL PERSONNEL, AND THE LAY PUBLIC TO VOCATIONAL AGRICULTURE IN 1964

Committee I

John C. Bruton, Chairman
Coweta, Oklahoma

Frank R. Davila
Santa Fe (Pojoaque), New Mexico

Robert H. White
Taos, New Mexico

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I. *Objectives of Vocational Education in Agriculture*

A. To train for gainful employment in agriculture

1. To train for gainful employment in agricultural subjects for those planning to engage in or already engaged in farming or ranching.

2. To develop competencies in agricultural subjects for those planning to engage in or already engaged in occupations other than farming or ranching that require knowledge or skills in agriculture.

3. To develop competencies in agricultural subjects for those who plan careers in fields of agriculture requiring college or other continuing education.

4. To provide exploratory experiences of an educational and vocational guidance nature in agriculture prior to and during enrollment in the high school and adult phases of the vocational agriculture program.

5. To develop leadership and civic responsibility through participation in group activities of specific youth and adult organizations.

6. To develop desirable personality traits, attitudes, and human relations skills required for success in an agricultural occupation.

Definition of Agricultural Competencies: Knowledge and skill in plant science, soil science, animal science, agricultural economics and business management, agricultural mechanization and automation, and agricultural leadership.

II. Laws that may affect students working part-time and attending school part-time.

Many students regularly attending the public schools of the State are also employed part-time. Increasing numbers of students are enrolling in secondary school sponsored cooperative part-time school work programs.

This summary of information contains some of the various laws affecting such students. Single agencies have issued pamphlets and bulletins covering one type of law, and these are usually available for a more detailed study from such agencies as the State Department of Education, the United States Department of Public Welfare, the Social Security Office, and the State Department of Distributive Education.

A. School District Liability

A school district is a governmental function and as such is not liable in performance of governmental functions. If the school board approves, the school is not liable nor can it be sued.

Be sure the occupational experience program is approved by the local board, and this is indicated by being recorded in the minutes of a board meeting.

B. Teacher Liability

This is a matter of degree. There are no laws, basic principles or guidelines. In court, decisions are based on evidence of proper safety instructions. In such cases, it is helpful to have safety tests given, materials taught, dates, etc. Decisions are based on prudence. A jury decides negligence, if any. A jury decides on completeness of any supervision. Therefore, it is safe to say, "If my instructions lead to trouble, I am liable. If the student is negligent, I am not liable."

A teacher can purchase insurance. A comprehensive personal policy is specifically endorsed for teaching as an occupation. Teachers are agents of the school board and as long as they are acting for and under the school board, they are protected.

A comprehensive general liability policy or contract covering agents and employees of school districts and buildings is available. This covers situations such as falling down stairs, cutting one's self, etc.

C. Employer Liability

An employer must have workmen's compensation insurance. An employer or teacher cannot sign away rights for any individual as to a liability. Workmen's compensation policy premiums depend on the amount of payroll.

1. Workmen's Compensation - two kinds
    a. Statutory Employment -- compensation is required
    b. Voluntary Employment -- for farmers, chauffeurs & servants

D. Student Liability

Insurance for himself is not required; however, it is well to suggest it. Two people cannot effect the rights of the third party.

Students working on a farm other than their home farm would be subject to all occupational hazards. They cannot be exonerated from tort rights under law covering liability in case of hazards.

Students working for an agricultural business as a part of the agriculture program would be subject to strict supervision of teachers, working as the agent of school board would not be liable, as to school and teacher but employer is not excused for tort.*

*Tort means wrong inflicted, injury. Any wrongful act (not involving a breach of contract) for which a civil action will lie, a civil wrong, independent of a contract.

E. Child Labor

Each state has slightly different child labor laws. Each teacher should be responsible for contacting the Employment Security Commission of his State.

F. Minimum Wage

Each State has a different minimum wage law. Each teacher is responsible for contacting the Employment Security Commission of his State concerning minimum wages.

G. Employment Certificate

No minor under 18 years of age should be employed without an employment certificate, which certificate shall be kept in file by the employer. Employment certificates shall be issued only by the district superintendent or supervising principal of schools for children residing within their respective school district. Application for the employment certificate must be made in person by the parent, guardian, or legal custodian of the minor for whom such certificate is requested.

General employment certificates are required for minors under 18 years of age. In compliance with your local labor laws, vacation employment certificates are required when minors under 18 are employed before or after school hours or during school vacation.

H. Social Security

If a student does not have a social security account number, which is shown on the social security card, he should check at the nearest social security office and apply for one. Application blanks may also be picked up at the local post office. Nearly all occupations are presently covered by social security and if the student earns more than $50 in a quarter of a year, he will have social security (presently 3 5/8%) deducted from his wages.

I. Withholding Tax

The employer will withhold a certain portion of the student's wages from his pay for federal income tax purposes. If the earnings during a calendar year do not exceed $600 (includes all earnings during the year), the student may file for a refund. This is not to say that the student may not file a tax return if he makes over $600, but only indicates that each student is presently given a $600 deduction regardless of whether his parents claim him for tax purposes.

J. Workmen's Compensation

Workmen's compensation for business is a mandatory program in most states. Students are covered by this insurance as long as they are compensated employees. State insurance covers all age groups whereas some private insurance rates vary according to the age groups to be covered. Since employers are given the choice of buying State or private insurance, it would be best if each teacher would check to see if each employer's insurance covers the age bracket in which the student falls.

K. Check with your State Unemployment Securities Commission about unemployment insurance.

L. Labor Unions

Before any student is placed in a training center, it should be determined to what extent, if any, the labor unions representing employees are involved. This information can be secured from the employer, employees or labor union representatives. As each training center is an individual establishment and the occupational training may vary, each student's case must be handled individually. It is the responsibility of the school to insure that this determination is made.

The following check list is suggested:

1. Have approval of local school authorities
2. School district liability
3. Teacher liability
4. Employer liability
5. Student liability
6. Child labor law
7. Minimum wage - mercantile operations
8. Employment certificate
9. Social security
10. Withholding tax
11. Workmen's compensation
12. Unemployment insurance
13. Labor unions

2

III. *Tests to determine interests* of pre-high school and high school students of vocational agriculture.

A. Guidance personnel should be encouraged to use vocational interest inventories as a part of the battery of tests given to students.

B. Interest tests are not designed to take the place of personal contact of students and parents, but may prove helpful in selecting students for counseling that are on the borderline of agricultural interests.

C. Types of interest tests

1. Pennsylvania Vocational Agriculture-Interest Inventory
   a. Specifically for students interested in agriculture
   b. Designed for eighth grade
   c. Can be taken in 45 minute period
   d. Oriented for specific area
      (1) Could be adapted for other regions
   e. Should be given by guidance counselor

2. Kuder
   a. Set up for vocational choice in 30 different areas
   b. Takes double period to administer
   c. Designed basically for junior high to high school

3. Strong Vocational Interest Blank
   a. Basically for upper levels in high school and freshmen in college
   b. Good to use as indicator of vocational choice for seniors in a supervised agriculture work experience program
   c. More difficult to administer

IV. Eighth and/or ninth grade orientation program and activities

A. Some of the activities and orientation programs that will stimulate interest of pre-high school students are:

1. Brochures
    - a. Mail brochures to each prospective students' parents before pre-registration.
    - b. Visit each prospective student with parent present and explain brochure.
2. Officers of FFA Chapters
    - a. Present activities of FFA chapter to meeting of prospective students
    - b. Explain program to individual prospective students
3. Invite pre-high school students to vocational and FFA activities
    - a. Open house
    - b. FFA meetings
    - c. FFA banquets
4. Invite parents of pre-high school students to vocational agriculture and FFA activities.
5. Provide information to guidance personnel concerning agriculture before pre-registration of students.
6. Organize a Junior Ag. Club with elected officers and a definite program of work.

V. Orienting school personnel and the lay public to vocational agriculture.

The brochures will be used as the main instrument to orient the public school personnel and the lay public of training in vocational agriculture. Programs will be presented to civic clubs of the community at every opportunity. Newspaper articles concerning the program will be used regularly.

VI. Bibliography

A. Hoover, N.K., "Handbook of Agricultural Occupations", The Interstate Printers and Publishers, Danville, Ill.

B. Byram, H.M., "Guidance in Agriculture Education", The Interstate Printers and Publishers, Danville, Ill.

C. Weyant, Hoover, McClay, "An Introduction to Agricultural Business and Industry", The Interstate Printers and Publishers, Danville, Ill.

D. "Summary of Liability, Child Labor Laws and Tax Information for Occupational Experience Programs", mimeographed, Department of Agricultural Education, Pennsylvania State University.

E. "Work Experience Education", brochure, Modesto, California City Schools.

F. "Vocational Agriculture Interest Inventory Form A", mimeographed, Pennsylvania State University.

G. "Laws Affecting Students Working Part-time and Attending School Part-time in the State of New Mexico", excerpts from, W. B. Runge, State Supervisor, Distributive Education, State Department of Education, Albuquerque, New Mexico.

H. "Proposed Objectives for Vocational Education in Agriculture", North Atlantic Region, 1964.

I. "Revised Objectives for Vocational Education in Agriculture", Ag-Ed 424 V, 1964.

J. "Guiding High School Students of Vocational Agriculture in Developing Farming Programs", U.S. Department of Health, Education & Welfare, U.S. Office of Education, Vocational Division Bulletin No. 54, 1954.

TEACHING OCCUPATIONAL INFORMATION
AND
PROVIDING EXPLORATORY WORK EXPERIENCE
FOR
AGRICULTURAL OCCUPATIONS

Committee II

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TEACHING OCCUPATIONAL INFORMATION AND PROVIDING EXPLORATORY WORK EXPERIENCE FOR AGRICULTURAL OCCUPATIONS

Problem

Opportunities in agriculture are no longer confined to the farm; but rather to production agriculture and opportunities in those fields which serve farmers, process and distribute farm products. These changes have opened fields of occupational opportunities which did not exist a few years ago and many in which there is a shortage of qualified employees at a time when the nation is perplexed with unemployment.

Objectives

1. To develop an understanding of the scope of occupations related to farming.
2. To consider the qualifications needed for occupations related to farming.
3. To develop an appreciation of opportunities in occupations related to farming.
4. To aid students in determining their strengths and limitations and in making their vocational choice in occupations related to farming.
5. To provide experience from which the student may draw in making occupational choices.

ITEMS NECESSARY IN DEVELOPING A GUIDANCE UNIT

A. Procedure
  1. Teacher preparation
    a. Secure reference material

      1. teacher assemble references
      2. teacher assemble addresses for which reference material can be obtained
      3. teacher order material in advance

    b. Arrange for audio-visual material in advance.
    c. Develop charts, graphs, bulletin boards, displays, etc.
    d. Contact resource persons planned to assist in unit.
    e. Arrange for field trips to businesses.
    f. Secure the cooperation and assistance of the guidance counselor.
    g. Secure the cooperation of school librarian.

  2. Student activities
    a. Collect occupational materials.
    b. Complete student vocational interest survey.
    c. Develop occupational briefs.
    d. Interview workers in selected agricultural occupations.
    e. Participate in exploratory activities in agri-occupations. (this may be in the form of learning skills, tours, research papers and reports or providing exploratory work experience).
    f. Plan a tentative high school curriculum to prepare for selected agricultural occupational area.
    g. Administer interest inventory test to students. This could be the Kuder, Strong or other appropriate tests.

  3. Reference Material To Be Used
    a. Books

      1. N.K. Hoover, Handbook of Agricultural Occupations, Interstate Publishers, 1964.

      2. Choose Your Career in Agriculture, Hoard's Dairyman.

      3. L. J. Phipps, Your Opportunities in Vocational Agriculture, Interstate Publishers, 1964.

      4. Occupational Outlook Handbook, Governmental Publication.

      5. Weyant, Hoover, McClay, An Introduction to Agricultural Business and Industry, The Interstate Printers and Publishers, Danville, Ill.

TITLE	SOURCE
b. Films	
1. A New Word for Farming	Modern
2. Careers in Agriculture	Cornet
3. Dynamic Careers through Agriculture	Farm Film Foundation
4. Your Career in Agriculture	Texaco
5. Breakthrough	Washington State University

c. Bulletins (sources)

1. Agricultural Colleges
2. USDA, USDL, US Forest Service, Civil Service, etc.
3. State Departments of Education
4. Business Firms
5. Science Research Association, Chronicle, etc.

GUIDELINES FOR EXPLORATORY WORK EXPERIENCE IN AGRICULTURAL OCCUPATIONS

Exploratory work experience is considered to be an occupational guidance activity in which the student observes and works in an agri-business for a short period of time to gain a better understanding of the work involved and for the development of occupational goals.

1. Job experience stations should be established in as many different kinds of agri-businesses as possible.
2. Surveying and contacting selected stations should be done well in advance.
3. A rotation of students through the stations should be systematic and all students should rotate to as many of the kinds of businesses as scheduled time will allow.
4. Administration and guidance personnel should be kept informed of all programs and follow-up information and statistics should be made available to them.
5. Instruction should be directed to the entire field of agricultural occupations.
6. Work experience should be scheduled during class time.
7. Vo-Ag instructor should be sure that the employer understands that the nature of the program is educational, and that the student should observe as many facets of the occupation as possible.
8. Approval of the parents for the student to be away from direct school supervision should be secured.
9. A careful check should be made of accident and health insurance coverage of the student.
10. No pay is involved in the exploratory work experience program.
11. Occupational guidance unit should be used in the first year; exploratory work experiences in the junior year; and cooperative occupational training in agriculture in the senior year.

A Suggestdd Classroom Teaching Plan for a Unit in Agricultural Occupations and Professions

I. Name of unit (job area) - agricultural occupations and professions.

II. Problem

A. Students of general and vocational agriculture are not aware of the many varied and diversified occupations in business and industry that require a knowledge of agricultural science.

B. Job titles are confusing and sometimes misleading as to the specific duties required of the occupation.

C. Students are not aware of the requirements and training necessary to enter agricultural occupations outside of production agriculture.

D. Guidance and counseling services in many schools are remiss in their knowledge of opportunities in agricultural occupations and thus do not counsel students into this field.

III. Objectives of the unit

A. To develop a comprehensive list of agricultural occupations that exist in the area and state.

B. To point out the opportunities and desirability of employment in agricultural occupations and professions.

C. To develop an understanding of the skills and technical knowledge necessary to be successfully employed in the various agricultural occupations.

D. To identify the interests of the students for a vocational choice.

IV. Procedure

A. Assemble necessary references and audio-visual materials.

B. Orient students to the purpose and objectives of this unit of study.

C. Develop study outline for unit in class. This outline should include the following informational points:

1. Establish areas of interest in agricultural occupations.
2. Define agri-industry.
3. List types of agricultural occupations.
4. What are occupations in production agriculture?

5. What are occupations in off-farm occupations?
6. What are agricultural professions?
7. What should you know about occupations in agriculture?
8. What basic education do you need for employment in agricultural occupations?

D. Review completed outline and explore areas of interest with students.

E. Have each student choose one or more occupations and develop an outline of the requirements for employment in this occupation, his or her qualifications for this occupation, and what skills or technical information he will need to acquire to be successfully employed in this occupation.

V. Review

A. Review in class the occupational outlines developed by each student.

B. Use guidance personnel and resource persons for added information.

Suggested Class Lessons for Vo-Ag I Occupational Guidance Unit

1. The importance of agriculture in our society (USA and the State)

2. The agriculture picture with respect to persons employed, payroll, trends, etc. (Dean Kottman, Ohio State)

3. The effect of education on lifetime earnings

4. Agricultural career opportunities in:

    (a) The livestock industry
    (b) Crops and soils
    (c) Farm power and machinery
    (d) Food processing and distribution
    (e) Forestry, wildlife, horticulture, floriculture
    (f) The agricultural professions

5. What to look for in a job or career (desirable characteristics)

6. Gathering occupational information in selected careers - developing career briefs.

7. College and trade school opportunities. Types, location, costs, requirements.

8. Planning your high school career for progress toward occupational goals

Suggested Class Lessons for an Occupational Guidance Unit in Vocational Agriculture III or IV

1. The importance of agricultural occupations in the USA and State with respect to persons employed, trends, etc.

2. The effect of education on lifetime earnings

3. Steps in selecting a career

4. Agricultural occupation opportunities in the various fields of agriculture - educational requirements, training, working conditions, salary, etc. - class discussions and individual student study and reports.

5. Desirable characteristics for a job

6. Self evaluation - interests, ambitions, aptitudes, values, intelligence, personality

7. Flanagan Aptitude Classification Test (FACT)

8. The importance of money (how much is necessary, where it goes, etc.)

9. What the employer wants (expects) from you

10. Sources of job information

11. Writing letters of application

12. The personal interview

13. How to succeed on the job

14. The importance of continuous education

15. How to enter and finance college or trade school

16. The apprenticeship program – labor organizations

17. Your military obligations

18. Effective salesmanship

19. The Peace Corps

20. Laws affecting workers

21. Insurance programs (social security, Workmen's Compensation, life insurance programs)

22. Your responsibilities as a citizen of the community

Teaching Situation:	General Agriculture or Vocational Agriculture I
Season to teach:	When Agri-business of the community would be able to supply Exploratory Work Stations
Period:	Two to six weeks

Job I – Exploring Agricultural Occupations

Problem

A. Agriculture and farming are generally thought of as being synonomous. This is partly due to a lack of knowledge on the part of persons who the student has been associated with.

B. Students in the eighth or ninth grade agriculture classes usually have indicated an interest in agriculture but have a very limited knowledge of opportunities in agricultural occupations.

C. Development of an interest area early in high school or junior high can aid the student in selecting high school curriculum that will better meet the needs of the student.

Objectives

A. To acquaint the student with the broad field of Agri-businesses and professional agriculture as well as farming and ranching.

B. To develop an understanding of personal interests and qualifications.

C. To develop an understanding of the qualifications needed for success in agricultural occupations.

D. To aid the student in matching his interests and qualifications with an area of work.

E. To aid the student in selecting a goal and mapping a plan to reach that goal.

Procedure

A. Assemble references well in advance or address where students may get reference material.

1. Check with guidance counselor and librarian for available material.
2. Secure other reference material from agriculture colleges, State employment service, agriculture industry, U.S.D.A., U.S. Dept. of Health, Education and Welfare.
3. Arrange for Audio-visual material.

4. Arrange for exploratory work experience stations.

B. Secure the interest of the student

1. Prepare bulletin board showing agricultural occupations one or two weeks in advance.

2. Secure job announcements for professional agricultural occupations and post on bulletin board so students can read them.
   (a) Post only two or three per day and remove them when new job announcements are put up. This will allow every student to read each announcement without distracting too much from the day's lesson. It should also keep interest high.

   (b) When students ask about these jobs, simply reply "You can have the job if you can qualify."

3. Use other methods to arouse interest.

C. Lead students to develop a purpose and objectives in studying Agriculture Occupations.

D. Lead students to develop outline for studying Agriculture Occupations. Outline should include:

1. What is an agriculture occupation?
2. What types of agricultural occupations exist on the farm?
3. What agricultural occupations exist in the community and State and Nation?
4. What would I expect of a job?
5. What would an employer expect of me?
6. What agricultural occupations do I have an interest in?
7. What qualifications do I have to offer to an employer?
8. What can I do to prepare for an agricultural occupation of my choice?

E. Lead the student to explore the outline developed in class.
1. Supervised study and class discussions.
2. Guest speakers, field trips, personal interviews and reports or panel discussions.
3. Films and other available audio-visual aids.
4. Use of guidance counselor and Interest Tests.

F. Present other needed information

G. Arrange for Exploratory Work Experience

H. Have students to choose two or three interest fields in agricultural occupations and complete occupational briefs.

I. Have students map out plans to help him become employable in the occupational field of his choice. Include such things as:

1. Educational requirements
2. Interest requirements
3. Work experience needed
4. Personal requirements

J. Follow-up in Junior and Senior year and at every opportunity for guidance.

References

A. Job announcements

1. Available from U.S. Civil Service Commission and can be picked up at the local Post Office.
2. Other job announcements available by writing to Ag-Industries established in your area or State.
3. State Employment Security Commission local office.

B. Curriculum catalogs from Agriculture Colleges.

C. Occupational brochures of various agriculture occupational fields.

D. Refer to accompanying list.

Teaching Plan
for
Agricultural Occupation Guidance

Class - Ag I
Presentation - 2nd 6 weeks
Length - 2 weeks

Objectives

1. To acquaint students with the agricultural occupations on the farm and ranch.
2. To acquaint students with the agricultural occupation off the farm.
3. To provide students with a knowledge of preparation needed to enter the many agricultural occupations.

Motivation Approaches

1. Working outside with livestock and machinery.
2. Background of successful agricultural business men in community.
3. Movie on agricultural careers.
4. Field trip to agricultural business firms.
5. The agricultural profession for college bound students.

Classroom and Student Activities

1. Define agricultural occupations.
2. Survey local and surrounding communities through yellow pages of telephone book for agricultural business firms.
3. Preparation of occupational briefs on agricultural occupations.
4. Survey former vo-ag graduates to determine what type of employment they had experienced. (part-time, summer, full-time.)

Evaluation

1. The use of written test
2. Use of student agricultural occupation knowledge for motivation in production science class work.

Some Possible Approaches to Providing Exploratory Work Experience

The following possibilities are listed to aid in giving direction to instructors who plan to include exploratory work experience in their vo-ag courses:

I. The inclusion of a two week block in Vo-Ag III (or IV) in which all students will participate in 6 hours of exploratory work experience in each of three different agricultural occupations. This will be done during class time with transportation provided by the school. Students will make selections of occupations based on interests and abilities.

II. The inclusion of a laboratory section conducted in the classroom in which the students select an agricultural occupation and set up an outline of the occupational requirements as a brief; students then fill in the necessary information by researching reference material available in the classroom or library, by personal interviews of employers in agri-business, and soliciting information by a mailed questionnaire to colleges, State Department of Labor or Employment, Agri-industries, and other sources.

III. Student to spend 6 to 8 hours in one day observing the operation of an agricultural business and the responsibilities of its employees.

IV. Student to work with a cooperating employer for a period of four weeks during class and free time with a total of 25 hours work experience to be performed at the training station.

V. If stations are not available for student to work on the job, Exploratory Work Experience may be provided through the use of tours and field trips. Much care should be taken in the planning of either of these to insure that the student observes as much of the total Agricultural Occupation as possible.

VI. Teacher to provide Exploratory Work Experience through the use of laboratory experience. This would involve teaching skills that would have a definite relationship to the business under study, "Learning By Doing."

COOPERATIVE, SUPERVISED, PART-TIME, OCCUPATIONAL EDUCATIONAL PROGRAM IN AGRICULTURE

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I. What is a cooperative, supervised, part-time occupational, experience program in agricultural education?

In Agriculture. Directed or supervised experiences in agriculture may be obtained by the student on a farm, in farm related agricultural occupations, or a combination of the two. Modern agriculture affords many employment opportunities for youth, which the effective teacher can utilize to build sound vocational educational programs designed to meet the needs of pupils and society.

It is "experience." It is "learning by doing."

It is "career centered." The student trainee is usually employed as a worker and receives wages and/or other compensation commensurate with his value to the employer. As a beginning worker, his value would normally be less than that of an experienced worker. Because of his career interest in learning and in gaining experience, and because he receives related class instruction, he may become a very valuable worker under continued employment.

It is "agricultural." Farm experience is a requirement to employment in many agricultural fields and a necessity for those planning careers in farming. The directed experience must be on a farm or in an agricultural establishment which contributes to the accomplishments of the students' occupational objectives.

It is "supervised." Supervised experience is considered as an integral part of the vocational agriculture training program. It must therefore be under the direction and supervision of the school.[1]

1. It is the responsibility of the school to select and approve the persons to be trained and the places for such training.

2. A plan of training (an individual training program) is cooperatively planned and agreed upon by the trainee, the teacher, and the employer.

3. The teacher keeps in close tough with the trainee and the employer to check on accomplishments, to discuss problems, to provide as well as assist the employer in providing on-the-job instruction, and to correlate the occupational experiences with the related class instruction.

4. The school accepts responsibility for evaluating the students' experience in cooperation with the employer.

II. For whom is supervised occupational experience intended?

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[1] Teachers Guide for the Effective Use of Records of Supervised Occupational Experience & Training in Vocational Agriculture.

This experience is intended for the following students of vocational agriculture including young adults:

1. Those who do not live on farms.

2. Those who live on farms which are part-time, residential, marginal, or for other reasons do not provide opportunity for experience of the type desired.

3. Those who desire experience on a farm or in an agricultural business of a distinctly different type than that carried on at home.

III. Guidelines for selecting and placing students

A. Selecting students - selection should be based on interest, aptitude, and learning capacity.

   1. Publicize program to students and parents

   2. Discuss with administration and guidance counselor possible trainees for the cooperative part-time work experience program.

   3. If the vocational agriculture curriculum includes an exploratory course in agricultural occupations, interested students may be selected from this group.

   4. Use a personal information sheet along with an application form to help screen applicants for the program.

   5. Various interest inventories may be used to select possible enrollees. (See committee No. 1 report for names of interest inventories.)

   6. Interview students

B. Placing students in work stations

   1. Coordinator should determine specific interests of enrollees.

      (a) Determine two or three training areas in which the student has an interest.

      (b) List these interests in order of preference.

   2. Attempt should be made to place student in area of first preference if his aptitude so warrants.

   3. Determine training station for which enrollee's qualifications appear to fit him.

4. Arrange a personal interview for enrollee with the employer.

5. Only students who are most likely to progress and succeed should be recommended to an employer.

6. Employer should always make the final selection.

IV. Guidelines to consider in selecting training stations

A. Develop an advisory committee from owners and managers of agricultural businesses.

B. Work with Chamber of Commerce to develop a list of potential training stations.

C. Visit with specific prospective employers.

1. Explain cooperative program.
2. Explain child labor laws and work permits.
3. Work out training plans with employer.
4. Be certain prospective employer does not look upon program as a source of cheap labor.

D. Develop certificates or other identification to present to employer after he accepts trainee.

V. Guideline for supervision and other responsibilities of coordinator

A. Correlating school work with job experience

1. Visit trainee on the job to determine training needs.
2. Prepare list of reference materials.
3. Check rating sheets turned in by employer.
4. Organize material on Social Security to present to class.
5. Help trainee about to graduate, prepare a letter of application for a job in another city.
6. Prepare equipment for demonstration in class.
7. Meet with group of employment officials to bring up to date the unit of study on "getting a job."
8. Arrange for special tutoring.
9. Arrange for personnel director to speak to cooperative class.
10. Show cooperative training films to class.
11. Check progress reports of trainees with their individual training schedules.
12. Explain to trainees the insurance regulations and how they apply them.
13. Chart business organization for trainees to explain their places in the organization.
14. Conduct conferences with job instructor to upgrade the instruction.
15. Encourage trainees to formulate a savings plan regardless of wage.

16. Work on instructional material for cooperative trainees.
17. Collect materials on job safety for presentation to class.
18. Order movie films to be used in cooperative class.
19. Prepare daily lesson plans to meet the need of cooperative class.
20. Help prepare students for interview for training job.

B. Occupational guidance and school scheduling

1. Help students arrange their school schedules.
2. Adjust working schedule of trainee to provide better training.
3. Make up cooperative training schedules for trainees after consultation with employers.
4. Confer with drop-outs to determine cause.
5. Assist principal with scheduling of part-time students.
6. Serve as member of guidance committee to secure more and better counseling preliminary to training.
7. Confer with guidance committee to explain opportunities in cooperative training.
8. Advise students regarding union affiliations in union shops.
9. Confer individually with cooperative students about to graduate.
10. Confer with cooperative students on question of going to college.
11. Talk to ninth grade class on how to plan high school program in order to include cooperative training in the junior and senior year.
12. Securing and making available occupational information and inventorying individual assets and limitations.
13. Preparation of individual inventory.

C. Caring for student's personal problems

1. Handle cases of truancy from job.
2. Meet with trainee and parent to settle individual problems.
3. Arrange with nurse for student's physical examination.
4. Help trainees with Federal and State income tax reports.
5. Confer with trainee, principal, parents regarding a discipline case.
6. Discuss with the trainee the advisability of having a hobby.
7. Encourage trainees to formulate a wage saving plan, regardless of amount of earnings.
8. Confer individually with trainee on confidential subjects.
9. Confer with trainees on subject of conduct on the job.
10. Confer with trainee in re: specific personality trait deficiencies noted by coordinator or employer.
11. Confer with trainee in re: work deficiencies.
12. Investigate tardiness and absence cases from school and work.
13. Handle discipline cases.

D. Making employment adjustments for students

1. Visit trainee on the job.
2. Check weekly work and time reports of trainees.
3. Adjust working schedule of trainee to provide better training.

4. Confer with student concerning complaints of employer.
5. Clear up misunderstanding between employer-employee.
6. Confer with employer on wage scale for employee.
7. Confer with employer on working deficiencies of student.
8. Arrange for trainees to spend extra hours on the job during rush hours.

E. Providing for extra-curricular activities

1. Sponsor after-school picnic or party for members of the program and employees.

F. Follow-up on the graduates

1. Arrange conferences between employers and trainees concerning permanent employment.
2. Write letter to former student who has received fine promotion congratulating him.
3. Discuss with manager the promotion of a former student.
4. Write to former trainees for suggestions on improvement of program.
5. Organize placement department for cooperative program graduates.
6. Set up permanent record forms in order to follow up graduates of vocational program.
7. Keep in contact with graduates by means of questionnaires.
8. Write letters of recommendation for graduates from your program.
9. Provide extension or post-graduate work for former students of the program.

G. Publicize the program

1. Explain cooperative program to employer.
2. Prepare school assembly program to acquaint students with cooperative program.
3. Prepare story on cooperative training for the newspapers.
4. Make home calls to get acquainted with parents of trainees, and to explain the program.
5. Explain training program to Chamber of Commerce and also to service clubs.
6. Explain details of program to school board at request of superintendent.
7. Discuss program with high school counselors.
8. Prepare bulletin on cooperative program for distribution to students, parents, and employers.
9. Meet with local union to explain the cooperative program.
10. Talk to P.T.A. about vocational training in general, and specifically the cooperative program.
11. Secure appointment of a cooperative training reporter for the school paper.

12. Call on employer, not in program, to discuss training opportunities in his organization.
13. Make "courtesy" calls.
14. Prepare new publicity plan to secure better distribution of information on cooperative training.
15. Confer with guidance counselors to explain opportunities in part-time training.
16. Serve as member of educational committee sponsored by local Chamber of Commerce.
17. Organize a department news sheet.
18. Talk to ninth grade class on how to plan high school program in order to include cooperative training in the senior year.
19. Attend district union meeting.
20. Participate in adult education forum.
21. Attend state union meeting.
22. Make use of the radio, newspapers, window displays in publicizing your program.
23. Educate your advisory committee to boost your program whenever and wherever possible.
24. Welcome opportunities to speak before faculty, students, and civic organizations.
25. Prepare and distribute handbills, bulletins, and pamphlets concerning cooperative program.

H. Administering the program

1. Prepare check-list rating sheet for use by training supervisors on the job.
2. Check weekly work and time reports of trainees.
3. Prepare six week's report on training program for principal and superintendents.
4. Make out report for State Board for Vocational Education.
5. Attend committee on curriculum revision appointed by superintendent of schools.
6. Explain laws governing part-time workers.
7. Reorganize advisory committee.
8. Make up department budget for next year.
9. Invite employer with unreasonable complaints to meet with advisory committee.
10. Meet with students in eleventh grade to explain requirements of entry into cooperative program in twelfth grade.
11. Discuss program with high school counselors.
12. Revise check sheet on which employers rate trainees.
13. Confer with principal on question of excusing cooperative people for school functions.
14. Help employer plan an inservice training program for all his employees.
15. Meet with advisory committee to plan revision of content of vocational courses.
16. Discuss uniform pay scale for all trainees with advisory committee.

17. Submit plans for expansion of vocational program to principal and superintendent.
18. Submit plans for expanding one-year training program into two years, with second year cooperative.
19. Discuss with superintendent the problem of an advisory committee "too busy" to function properly.
20. Explain child labor regulations and work permits to employer.
21. Check to determine whether Federal and State laws with respect to training are being violated.
22. Confer with drop-outs to determine student causes.
23. Discuss with superintendent the question of using school buses for transportation of trainees to jobs during noon hour.
24. Prepare data on cost per pupil for superintendent to present to his board.
25. Prepare training agreement to be signed by employer, trainee, parent, and school.
26. Meet with irate parent to clear up misunderstanding of program.
27. Discuss with advisory committee the question of raise in wages for trainee.
28. Check progress of cooperative students in other school subjects.
29. Compile data for various required reports.
30. Make out annual reports to the principal and superintendent.
31. Discuss with principal the amount of school credit granted cooperative students.
32. Prepare a six week's progress report to be sent to parents of trainees.
33. Prepare final cards for graduates showing training units completed, hours in each, rating on ability, etc.
34. Attend conferences on coordination problems with teacher trainer or state supervisor.
35. Discuss grading system for cooperative students with principal.
36. Serve as chairman of curriculum committee for local high school.
37. Plan series of professional meetings for department staff.
38. Make out requisitions for next year's supplies.
39. Discuss with superintendent plans for organizing advisory committee.
40. Investigate tardiness and absence cases.
41. Discuss trainee's status with union shop steward.
42. Arrange for trainees to spend extra hours on the job during rush periods.
43. Confer with trainee, parents, and superintendent regarding a discipline case.
44. Handle discipline case.

VI. Other considerations

A. Pre-requisites

1. Enrollee must be at least 16 years of age and should be either a junior or senior student.

2. Enrollee should have completed course work in basic agricultural science and agricultural occupations which preferably has included exploratory work experience.

3. Enrollee should have the approval of the class instructor before registering for the course. This approval given only after guidance interviews with the student by the school counselor and/or the class instructor.

4. A training station must be available which will provide the particular occupational experience that is desired and needed by the enrollee.

B. Schedule of classes

1. The "in-school" class for these students should occur at a period which will permit two successive periods immediately following for the supervised occupational training program.

Suggested schedule:

Period 4 - Agricultural occupations class
Period 5 - Supervised occupations training
Period 6 - Supervised occupations training

C. School credit

1. Credit should be granted - 1 credit for each hour of the school day the student is enrolled in the supervised occupational program (in school and on the job).

2. Credit should be applicable to high school graduation requirements and also be acceptable to post-high school training agencies in meeting their entrance requirements.

D. Financial compensation

1. For that time an enrollee spends at the training station he should receive pay commensurate with the service he provides.

2. The training plan should contain a statement indicating the starting pay and schedule of increases.

3. The starting pay should be conservative and increases sufficient so that the enrollee can see that his increased knowledge is being recognized with increased pay.

VII. Course content

Three things are involved in learning a trade or preparing for an occupation. They are:

1. Manipulative skills which are actually required to perform the job.
2. Technical and related information.
3. Development of personal-social traits which are so essential in getting along with others.

In the vocational cooperative program, the actual manipulative skills needed to do a job are taught by the employer.

The technical and related information can be taught either by the employer or the school. In most cases it can be most effectively taught by the school in the related study class. The actual development of personal-social traits along with others is vitally needed by every worker in getting along with others and is entirely up to the individual himself. The coordinator is often able to offer helpful suggestions for the improvement of the job personality of the employee-students.

It can easily be seen that in a related study class, there might be students representing a variety of occupations; however, for each individual in the class, the instruction is specific to the occupation in which he is working. Obviously, specialized and technical related material for each occupation can only be taught on an individual basis. Most of the class is devoted therefore to a study of the occupation in which each individual is working. Information which is of general interest to the entire group such as social security, securing a job, health, labor laws, taxes, budgeting, saving and investing, insurance, etc., is taught to all students as a group. Student-learners are part-time workers and as such they come under laws affecting other workers. All part-time employer students should know something about labor laws, labor organizations, etc.

DEVELOPING A HIGH SCHOOL COURSE OF STUDY FOR AGRICULTURAL OCCUPATIONS

Committee Report IV

New Mexico State University

July 31, 1964

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Developing A High School Course of Study For Agricultural Occupations

In developing a high school course of study for agricultural occupations, vocational agriculture teachers should realize that this involves the teaching of skills, abilities and knowledge required to perform duties and responsibilities of a specific occupation. Integrating this occupational information with subject matter or skills being taught appears to be an effective method of presentation.

Several methods of introducing occupational information in agriculture at the beginning of each subject matter unit were suggested by a group at Pennsylvania University[1]:

1. Analyze the agricultural occupation opportunities in the area related to the subject matter unit.
2. Class discussion of occupational opportunities in the area or community and list them on the board.
3. Divide the class into study groups and then have a panel-forum on occupations associated with the subject matter of the unit.
4. Use state employment office for job opportunity material.
5. Show films, filmstrips, posters and use other visual aids on occupations related to the unit.
6. Develop a department file on agricultural occupations information.
7. Have students tell about occupational experiences they have had related to the unit.
8. Have seniors tell under-classmen of their experiences in agricultural occupations.

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[1] Charles Lebo, Donald Overdorff, Donald Evans, "Teaching Occupational Information in Agriculture By Integrating It with Agricultural Subject Matter" (Mimeograph: Pennsylvania State University, 1964).

9. Have graduates tell the class about their experiences in agricultural occupations related to the unit.

10. Take field trips to agriculture industries in the area that are related to the subject matter of the unit.

This committee also recommended that at the end of each subject matter area that the teacher supervise a follow-through study and have the students to:

1. Write for occupational information.
2. Prepare a file of agricultural occupational information.
3. Aid in developing a departmental file on occupational information.
4. Attend or participate in local or state "Career Days".
5. Conduct an occupational interview with an agricultural businessman.
6. Interview prominent farmers in the area.
7. Take field trips to agricultural industries in the area.
8. Prepare job descriptions for several occupations in which he is interested.
9. Be placed in an agricultural occupation for a supervised occupational experience program.

PLANT AND SOIL SCIENCE

A. Elementary Botany*

1. Occupational Information
    - a. Introduction
    - b. Occupations

On Farm

1. Farmer
2. Rancher
3. Farm Manager

Off Farm

1. Seedsman
2. Agronomist
3. Botanist
4. Nurseryman
5. Florist

2. Basic plant structures as cells, tissues, and organs.
3. Structure and function of roots, stems and leaves.
4. Dependency of each part of the plant on all other parts.
5. Major plant classification.
6. Follow-through.

B. Plant Growth and Development

1. Occupational Information
    - a. Information
    - b. Occupations

On Farm

1. Farmer
2. Farm Manager
3. Rancher

Off Farm

1. Nurseryman
2. Landscape designer
3. Plant propagator
4. Agronomist
5. Plant industry inspector

2. Function of Light
3. Temperature functions
4. Water relationships
5. Nutrient relationships
6. Follow-through

C. Types of Soil

1. Occupational Information
    - a. Introduction
    - b. Occupations

On Farm

1. Farmer
2. Farm Manager
3. Rancher
4. Farm equipment operator

Off Farm

1. Soil conservationist
2. Soil scientist
3. Fertilizer salesman
4. Farm building contractor
5. Irrigation specialist

*Only the first two units were expanded to show how instruction orientated toward both on-farm and off-farm agricultural occupations would fit into the total subject-matter instructional program. Other subject-matter areas would be expanded in the same manner.

D. Soil Conservation

   1. Occupational Information
      a. Introduction
      b. Occupations

On Farm

1. Farmer
2. Farm Manager
3. Rancher

Off Farm

1. Soil conservationist
2. Soil conservation technician
3. Forester
4. Range Management advisor
5. Surveyor
6. Soil mapper

E. Maintaining Soil Fertility

   1. Occupational Information
      a. Introduction
      b. Occupations

On Farm

1. Farmer
2. Farm manager
3. Rancher

Off Farm

1. Soil conservationist
2. Soil conservation technician
3. Fertilizer salesman
4. Soil scientist
5. Soil technician

F. Small Grain Production

1. Occupational Information
   a. Introduction
   b. Occupations

On Farm

1. Farmer
2. Farm Manager

Off Farm

1. Soil conservationist
2. Fertilizer salesman
3. Grain buyer
4. Grain inspector
5. Grain sampler
6. Elevator operator
7. Feed dealer
8. Mobile feed mill operator
9. Seed cleaner operator
10. Custom machine operator
11. Farm storage designer
12. Farm storage salesman

G. Cotton Production

1. Occupational Information
   a. Introduction
   b. Occupations

On Farm

1. Farmer
2. Farm Manager

Off Farm

1. Cotton buyer
2. Cotton fieldman
3. Cotton grader
4. Cotton gin operator
5. Ginner
6. Ginwright
7. Crop duster pilot
8. Custom farm machine operator
9. Liquid fertilizer application machine operator
10. Gin and Warehouse manager
11. Entomologist
12. Herbicide salesman
13. Fertilizer salesman
14. Defoilant salesman

H. Forage Production

1. Occupational Information
    a. Introduction
    b. Occupations

On Farm	Off Farm
1. Farmer	1. Custom farm machine operator
2. Farm Manager	2. Feed dealer
	3. Forage crop dehydrator
	4. Machinery repairman
	5. Farm storage designer

I. Pasture Improvement

1. Occupational Information
    a. Introduction
    b. Occupations

On Farm	Off Farm
1. Farmer	1. Bulk lime and fertilizer spreader
2. Farm manager	2. Insecticide salesman
	3. Herbicide salesman
	4. Agronomist
	5. Entomologist

J. Harvesting Farm Crops

1. Occupational Information
    a. Introduction
    b. Occupations

On Farm	Off Farm
1. Farmer	1. Custom farm machine operator
2. Farm manager	2. Farm machinery salesman
	3. Farm machinery mechanic
	4. Farm machinery set-up man
	5. Feed mill operator
	6. Feed fieldman

K. Vegetable Production

1. Occupational Information
    a. Introduction
    b. Occupations

On Farm	Off Farm
1. Farmer	1. Produce buyer
2. Farm manager	2. Produce grader
	3. Fertilizer salesman
	4. Soil technician
	5. Soil scientist
	6. Plant breeder

L. Forestry

1. Occupational Information
    a. Introduction
    b. Occupations

On Farm	Off Farm
1. Farmer	1. Forest ranger
2. Farm manager	2. Timber buyer
	3. Lumber grader
	4. Forester
	5. Forest patrolman
	6. Sawmill operator
	7. Wildlife biologist

M. Irrigation

1. Occupational Information
    a. Introduction
    b. Occupations

On Farm	Off Farm
1. Farmer	1. Irrigation system designer
2. Farm manager	2. Well driller
	3. Irrigation system installer
	4. Soil conservationist
	5. Fertilizer salesman

ANIMAL SCIENCE

A. Sheep Production

1. Occupational Information
    a. Introduction
    b. Occupations

On Farm

1. Farmer
2. Rancher
3. Herdsman
4. Laborer

Off Farm

1. Sheep drencher
2. Sheep dipper
3. Sheep shearer
4. Wool grader
5. Wool buyer
6. Livestock buyer
7. Veterinarian
8. Commission man
9. Nutritionist
10. Butcher
11. Wool warehouse employee
12. Livestock truck driver
13. Stockyard manager
14. Slaughter house manager
15. Agriculture teacher
16. County agricultural agent
17. Agricultural editor
18. Meat inspector
19. Animal industry lab technician
20. Breed association worker

B. Beef Production

1. Occupational Information
    a. Introduction
    b. Occupations

On Farm

1. Farmer
2. Rancher
3. Herdsman
4. Laborer

Off Farm

1. Artificial inseminator
2. Livestock auction employee
3. Livestock buyer
4. Livestock truck buyer
5. Livestock disease control man
6. Slaughter house employee
7. Butcher
8. Stockyard manager
9. Veterinarian

10. Livestock commission men
11. Live-car caretaker
12. Agriculture teacher
13. County agricultural agent
14. Agricultural editor
15. Meat inspector

C. Swine Production

- 1. Occupational Information
  - a. Introduction
  - b. Occupations

On Farm

1. Farmer
2. Rancher
3. Herdsman
4. Laborer

Off Farm

1. Nutritionist
2. Agricultural editor
3. County agricultural agent
4. Vocational agriculture teacher
5. Live-car caretaker
6. Butcher
7. Veterinarian
8. Livestock disease control man
9. Livestock buyer
10. Livestock truck driver
11. Stockyard employee
12. Slaughter house employee
13. Meat inspector
14. Livestock auction employees

D. Poultry Production

- 1. Occupational Information
  - a. Introduction
  - b. Occupations

On Farm

1. Farmer
2. Farm Laborer

Off Farm

1. Egg grader
2. Egg inspector
3. Hatchery employee
4. Wholesale egg plant employee
5. Chick sexer
6. Poultry buyer
7. Poultry grader
8. Butcher
9. Egg plant truck driver
10. Egg candler
11. Nutritionist
12. Disease control workers

E. Dairy Production

1. Occupational Information
    a. Introduction
    b. Occupations

On Farm	Off Farm
1. Farmer	1. Dairy plant manager
2. Laborer	2. Milk inspector
	3. Dairy plant engineer
	4. Dairy plant lab technician
	5. Dairy plant fieldman
	6. Ice cream maker
	7. Cheese maker
	8. Bulk tank truck driver
	9. Dairy plant maintenance man

F. Animal Nutrition

1. Occupational Information
    a. Introduction
    b. Occupations

On Farm	Off Farm
1. Farmer	1. Feed lot operator
2. Rancher	2. Nutritionist
	3. Veterinarian
	4. Zoo keeper
	5. Feed mill employee & operator
	6. Custom feed grinding & mixing
	7. Feed salesman
	8. Feed buyer

G. Meats

1. Occupational Information
    a. Introduction
    b. Occupations

On Farm	Off Farm
1. Farmer	1. Butcher
2. Rancher	2. Federal or state meat inspector
3. Laborer	3. Meat grader
	4. Slaughter house employee

AGRICULTURAL MECHANIZATION

Units in Farm Mechanics for Farmers and Ranchers	Occupations in Agriculture for which these units are helpful
Construction and Maintenance	
On Farm	**Off Farm**
Blacksmithing	1. Blacksmithing, General
	2. Blacksmithing, Ferrier
	3. Blacksmith, Welder
Welding, Arc	1. Shop Foreman
	2. Welder Repairman
	3. Welder Specialist
	4. Welder Helper
	5. Welder and Supplies Salesman
	6. Welder Repairman, Field
Welding, Gas	1. Shop Foreman
	2. Welder, General
	3. Welder, Machine (New Equip.)
Woodworking	1. Construction Foreman
	2. Carpenter
	3. Carpenter Helper
	4. Laborer
Metal Work	1. Machinery Repair
	2. New Construction (Foreman Helper, etc.)
Finishing, Painting and Glazing	1. Painter Foreman
	2. Painter
	3. Painter Helper
	4. Glazer
	5. Machine Operator (finisher)
Farm Buildings and Conveniences	
Farm Layout, Drawing	1. Construction Foreman
	2. Asst. Construction Foreman
	3. Carpenter
	4. Carpenter Helper
	5. Laborer

Blueprints, Plans	1. Shop Foreman
	2. Asst. Shop Foreman
	3. Helper
	4. Laborer
Building Materials	1. Construction Foreman
	2. Asst. Construction Foreman
	3. Carpenter
	4. Helpers
	5. Laborer
Masonry and Concrete	1. Foreman
	2. Stonemason
	3. Apprentice Stone Mason
	4. Mortar Mixer
	5. Laborer
Water Systems	1. Irrigation Specialist
	2. Soil and Water Specialist
	3. Salesman
	4. Custom Machine Operator
	5. Laborer
	6. Plumber
Disposal Systems	1. Plumber
	2. Custom Machine Operator
	3. Pipe Fitter
	4. Surveyor
	5. Laborer
Fencing	1. Fence Contractor
	2. Foreman
	3. Machine Operator
	4. Surveyors

Farm Power

Tractor Mechanics	1. Shop Foreman
	2. Asst. Shpp Foreman
	3. Mechanic
	4. Mechanic's Helper
	5. Machinery Set-up Man
	6. Machinery Repairman
Production Implements	1. Machinery Foreman
	2. Asst. Machinery Foreman
	3. Machinery Repairman
	4. Machinery Repairman Helper

Transmission	1. Special Transmission Mechanic 2. Mechanic's Helper
Electricity	1. R.E.A. Line Foreman 2. R.E.A. Lineman 3. Laborer

New Units in Agriculture Mechanics

Mechanics	1. Small Engine Mechanic
Electronics	1. Electronics Repairman Timers, Switches, Controls
Construction and Maintenance	1. Greenhouse Builder 2. Greenhouse Repairman 3. Greenhouse Systems Mechanic

AGRICULTURAL BUSINESS AND MANAGEMENT

Units for Farmers and Ranchers	Occupations in Agriculture for which these units are helpful
Farm Records	Banker
Taxes	Credit
Social Security	Insurance Salesman
Farm Law	Land Appraiser
Financing Agriculture	Real Estate Salesman
Marketing	Marketing Specialist
Insurance	Railroad Agricultural Agent
	Public Utilities Agricultural Agent
	Produce Sales
	Equipment Sales
	Farm Supplies Sales

New Units for Off-farm Agricultural Occupations

Employment Information

1. Sources of job information
2. Skills and abilities required
3. Job procurement
4. Legal Information
5. Benefits and wages

Human Relations

1. Developing a winning personality
2. Problems of and suggestions for the new worker
3. Relations with fellow workers
4. Relations with supervisors
5. Maintaining good relations with employers, co-workers and customers

ORNAMENTAL HORTICULTURE

A. Survey of ornamental horticulture
   1. Nature of the ornamental horticulture trades
   2. Opportunities for employment in nursery, greenhouse landscaping and floristry fields

B. Elementary Botany
   1. Occupational Information
      a. Introduction
      b. Occupations

On Farm*	Off Farm
1. Farmer	1. Botanist
2. Rancher	2. Botany lab technician
3. Farm Manager	

C. Plant Growth and Development
   1. Occupational Information
      a. Introduction
      b. Occupations

On Farm	Off Farm
1. Farmer	1. Horticulturalist
2. Rancher	2. Nurseryman
	3. Plant propagator
	4. Groundskeeper
	5. Landscape designer

D. Soil Study and Soil Chemistry
   1. Occupational Information
      a. Introduction
      b. Occupations

On Farm	Off Farm
1. Farmer	1. Soil chemist
	2. Soil conservation aid
	3. Greenhouse employee
	4. Nursery employee
	5. Landscape designer
	6. Landscape architect

*Not necessarily involved in the production of horticultural crops.

E. Soil Preparation and Sterilization

1. Occupational Information
    a. Introduction
    b. Occupations

On Farm	Off Farm
1. Farmer	1. Fertilizer salesman
	2. Agricultural chemical salesman

F. Principles of Plant Propagation

1. Occupational Information
    a. Introduction
    b. Occupations

On Farm	Off Farm
	1. Seedsman
	2. Plant propagator
	3. Plant grafter
	4. Plant breeder

G. Characteristics of Shrubs

1. Occupational Information
    a. Introduction
    b. Occupations

On Farm	Off Farm
1. Farmer	1. Nurseryman
	2. Landscape designer
	3. Landscape architect
	4. Groundsman

H. Characteristics of Trees

I. Characteristics of Ground Covers

J. Principles of Home Ground Design

1. Occupational Information
    a. Introduction
    b. Occupations

On Farm	Off Farm
	1. Landscape designer
	2. Landscape architect
	3. Rural home builder

K. Principles of Planting Parks, Institutions and other Commercial Properties

1. Occupational Information
    a. Introduction
    b. Occupations

On Farm	Off Farm
	1. Landscape designer
	2. Landscape architect
	3. Planter
	4. Groundskeeper

L. Lawn Care

1. Occupational Information
    a. Introduction
    b. Occupations

On Farm	Off Farm
	1. Landscape designer
	2. Groundskeeper
	3. Turf propagator
	4. Golf course turf manager
	5. Fertilizer salesman

M. Disease Control

1. Occupational Information
    a. Introduction
    b. Occupations

On Farm	Off Farm
1. Farmer	1. Plant pathologist
	2. Agricultural chemical salesman

N. Insect Control

1. Occupational Information
    a. Introduction
    b. Occupations

On Farm	Off Farm
1. Farmer	1. Entomologist
	2. Insecticide salesman

O. Nursery Principles

1. Occupational Information
2. Occupations

On Farm	Off Farm
1. Farmer	1. Nurseryman
	2. Plant propagator
	3. Plant grafter
	4. Plant budder

P. Greenhouse Management

1. Occupational Information
2. Occupations

On Farm	Off Farm
	1. Control systems technician
	2. Glazer
	3. Painter
	4. Cooling and Heating Engineer
	5. Greenhouse employee

Q. Culture of House Plants

1. Occupational Information
   a. Introduction
   b. Occupations

On Farm	Off Farm
	1. Greenhouse worker
	2. Greenhouse grower
	3. Greenhouse lab technician
	4. Greenhouse salesman
	5. Greenhouse production manager
	6. Greenhouse manager
	7. Garden center worker
	8. Floral shop worker

R. Pruning and Shearing Plants

1. Occupational Information
    a. Introduction
    b. Occupations

On Farm	Off Farm
	1. Nursery manager
	2. Landscape consultant
	3. Nursery production manager
	4. Grounds maintenance man
	5. Tree surgeon
	6. Tree pruner
	7. Christmas tree shearer
	8. Landscape gardeners helper
	9. Landscape gardener
	10. Cemetary caretaker
	11. Groundskeeper

S. Production of Bedding Plants

1. Occupational Information
    a. Introduction
    b. Occupations

On Farm	Off Farm
	1. Greenhouse manager
	2. Production supervisor
	3. Greenhouse grower
	4. Plant Pathologist

T. Elementary Floristry

1. Occupational Information
    a. Introduction
    b. Occupations

On Farm	Off Farm
	1. Florist
	2. Floral designer
	3. Floral shop manager
	4. Dyer (floral tinter)

VOCATIONAL AGRICULTURE DEPARTMENT

_______________ SCHOOLS

____

(City) (State)

_________________________ Superintendent of Schools

_________________________ Principal, _______________ High School

_________________________ Vocational Agriculture Instructor

_________________________ School Board President

_________________________ School Board Secretary

_________________________ School Board Member

_________________________ School Board Member

_________________________ School Board Member

INTRODUCTION

This handbook is designed to answer some of the questions which are asked about the vocational agriculture program. We urge you to read all of it and hope that it will be useful to you in understanding the program.

We encourage students to discuss the program with their parents, as well as with the counselors and teachers at the high school. It is hoped that you will know as much as possible about this phase of our educational program, in order that you may determine whether or not you wish to participate.

The school system is pleased to provide this type of educational opportunity for the students in our high school.

Supervising Teacher

Superintendent of Schools

President of FFA

Agriculture Is a Dynamic and Vital Industry

The definition of modern agriculture consists of a great 5-member team. These include the farmer or producer, the supply and service firms for the farm, the processors of agricultural products, the wholesalers, and the retailers.

This team employs 24 per cent of the nation's total labor force, which is a far larger number than the 7 per cent of the workers that are employed on the farms. There are 3.7 million on the farms, but a total of over 16 million workers altogether involved in the business of producing enough food and fiber for our total population.

Some people may believe that because there are nearly the same number of farmers today as 100 years ago that farming really is not very important. What must be remembered, is that farms are bigger, more efficient, and served by an increasing number of businesses which service farms. There are almost 6 million persons involved in farm production supply and service. Three million people work in processing farm and ranch products. More of these types of jobs are being created every day, and someone with training in agriculture is needed to fill them!

It is because of agricultural businesses in this country that the United States is a world leader today, and the U.S. will remain a leader only as long as this Nation's Agriculture continues to do the job that it has done in the past.

I. Objectives of Vocational Education in Agriculture

A. To train for gainful employment in agriculture

1. To train for gainful employment in agricultural subjects for those planning to engage in or already engaged in farming or ranching.

2. To develop competencies in agricultural subjects for those planning to engage in or already engaged in occupations other than farming or ranching that require knowledge or skills in agriculture.

3. To develop competencies in agricultural subjects for those who plan careers in fields of agriculture requiring college or other continuing education.

4. To provide exploratory experiences of an educational and vocational guidance nature in agriculture prior to and during enrollment in the high school and adult phases of the vocational agriculture program.

5. To develop leadership and civic responsibility through participation in group activities of specific youth and adult organizations.

6. To develop desirable personality traits, attitudes, and human relations skills required for success in an agricultural occupation.

Definition of Agricultural Competencies: Knowledge and skill in plant science, soil science, animal science, agricultural economics and business management, agricultural mechanization and automation, and agricultural leadership.

The total course of study for the vocational agriculture program consists essentially of five divisions which are:

1. Agricultural mechanics
2. Plant science
3. Soil science
4. Animal science
5. Agricultural Economics and Business Management

Supervised practice in this department is designed to give the student desirable experiences and skills which help qualify the student for work placement. These are explained in the following pages.

The three elements of supervised practice are:

1. Supervised farming programs
2. Placement for farm experience
3. Placement for work experience in agricultural occupation

Supervised Farming Programs in Vocational Agriculture

It is strongly recommended that agricultural experiences of vo-ag students include Production Projects, Improvement Projects, and Supplementary Farm Practices on the Home Farm, whenever possible.

These activities give the student an opportunity to gain experience, earn money, improve appearance, comfort and production of the home farm, and develop necessary skills for becoming proficient in agriculture.

The long time supervised farming program is set up the first year in cooperation with the student, parents and the instructor of vocational agriculture, and should be designed for improvement in quality and increase in scope.

Placement for farm experience providing on the farm experiences for those students who are lacking farm experience. The student is located on a farm which would provide a variety of desirable farm experiences. The instructor of vocational agriculture will supervise and follow up such placement training experience.

Placement of students for farm experience and training is intended primarily for:

1. Student whose home farm facilities are inadequate.
2. Students not living on farms but are interested in farm experiences.

Placement for Work Experience in Agricultural Occupations

With the changes that have taken place in agriculture in the past years, it is easy to see that production in agriculture is limited.

Today there are some sixty-eight million persons employed in the United States. Of this, there are seven million on the farms, six million in services to the farms and ten million processing, handling or storing farm products. This is twenty-three million or about one-third of the jobs in the United States that are associated with farms or farm produce.

It is thought by many that the number in production agriculture will still decline and the number in the service processing, marketing and handling areas will increase.

The work experience phase of the Vocational Agriculture program will offer opportunities of training in the following broad areas with each individual involved being placed in specific areas.

1. Farm service occupations
2. Farm machinery and equipment sales and service occupations
3. Livestock industry occupations
4. Occupations in agronomy areas
5. Occupations in ornamental horticulture
6. Occupations in wildlife and recreation
7. Semi-professional occupations
8. Agricultural positions requiring a college education
9. Areas in agricultural business

Future Farmers of America

The Future Farmers of America, or "FFA" as it is commonly known, is the national organization of, by and for boys studying vocational agriculture in the ________________ high school. It is a non-profit, non-political, non-sectarian farm youth organization of voluntary membership.

The ______________ high school chapter is a part of the _______________ state association, and the national FFA organization, with chapters in all of the 50 states.

The FFA is an intra-curricular activity having its origin and root in a definite part of the school curriculum - vocational agriculture. Members advance in the organization as they develop leadership and experience in agriculture. The members learn, among other things, how to conduct and participate in meetings; to solve their own problems; to assume responsibility.

The foundations of the FFA includes:

Leadership development

Character development

Cooperation

Sportsmanship

Service

Thrift

Scholarship

Improved agriculture

Organized recreation

Citizenship and patriotism

CLOSING STATEMENTS

Dr. N.K. Hoover

We are emerging in an era, where we must be careful of our terminology, and not just to justify our program. We have now, a rather clear cut objective of "training for employment in agriculture." We're going to get the student started on the road to having salable skills on the labor market. The graduates of high schools are not a finished product; there must be some post-high school training.

This conference has forced us to pull together some new material, and we now have the materials needed to get started.

These new programs will force some marriages. That's good. We should take the initiative and get started.

Some precautions:

1. We must plan to teach certain skills and activities to go along with skills learned on the job.

   The supervised work experience must be planned and supervised.
2. We must be careful to avoid public image of supervised work experience being a low-grade program.
3. As we take the role of leadership in our respective home states, the teacher must have:
   - a. The patience to get new programs off the ground.
   - b. The wisdom to take one step at a time, but don't be afraid to take another step.
   - c. The faith that the program will develop as we all learn more about the program.

SELECTED READING LIST

SELECTED READING LIST—THE AGRICULTURAL EDUCATION MAGAZINE

Ag. Ed. 424v

Tenney, A. W. Agricultural Occupations -- The Needs in the United States. April, 1963.

Harris, W. H. Teaching Farm Related Occupations in Pennsylvania, July, 1963.

Allison, J. W. Fifteen Years Experience in Teaching for Agricultural Careers -- North Carolina. July, 1963.

Courtney, E. W. and Coster, J. K. Non-Farm Agricultural Occupations and Curriculum Planning. August, 1963.

Aebischer, D. C. Farming Programs are Basic to Occupational Experience in Agriculture. August, 1963.

Juergenson, E. M. Providing Occupational Experiences for Boys with Limited Opportunities. August, 1963.

Lawrence, L. D. Agricultural Occupations -- A Course for Seniors. January, 1964.

Byram, H. M. The Modern Guidance Role of the Teacher of Agriculture. April, 1964.

Thompson, L. M. Vocational Agriculture as Preparation for College. April, 1964.

Thompson, John F. Improving Counseling Interviews. April, 1964.

Sparrow, R. L. Exploring Farm Related Occupations. April, 1964.

Hoover, N.K. Teaching for Occupational Guidance in Agriculture. April, 1964.

Walker, R. W. Interest Inventory Test Developed for Prospective Vo-Ag Students. April, 1964.

Bullard, A. G. A New Design for High School Vocational Agriculture. July, 1964.

Dougan, J. E. Training Technicians. July, 1964.

Agan, R. J. Kansas Studies Agricultural Non-Farm Occupations. July, 1964.

McComas, J. D. Teacher Tasks in Agricultural Occupation Programs. January, 1965.

A Report of Joint-Combined Vocational Programs Involving Agriculture Education, Colorado State Board for Vocational Education, Denver, Colorado, 1964, mimeo.

Agricultural Occupations Information, State Board for Vocational Education, Olympia, Washington, 1964.

Curriculum Guide (Tentative) Agricultural Technology, Vocational Materials Laboratory, State Department of Public Instruction, Raleigh, North Carolina, April, 1963.

Developing Agricultural Business Curricula in California Junior College, California State Department of Education, Sacramento, 1962.

Educating for a Changing World of Work, Governor's Committee on Technical-Vocational Education, State Department of Vocational Education, Phoenix, Arizona, 1962.

Exploring Agricultural Occupations in Vocational Agriculture, State Department of Public Instruction, Agricultural Education Division of Vocational Education, Raleigh, North Carolina, 1962.

Instructional Guides for Career Guidance in Agricultural Occupations, State Board for Vocational Education, Olympia, Washington, 1960.

My Teaching Program in Agriculture, 1962-1963, mimeo, Committee Report, State Department of Public Instruction, Raleigh, North Carolina, July, 1962.

Occupational Guidance Through Vocational Education in Agriculture, Hoover, Norman K., Department of Agricultural Education, Pennsylvania State University, University Park, Pa., 1963.

Prepare Yourself for a Non-farming Agricultural Occupation, Division of Vocational Education, State Department of Public Instruction, Raleigh, North Carolina, July, 1962.

Technical Education in and for Rural Areas, Staff Study, Division of Agricultural Education, Department of Vocational, Technical and Practical Arts Education, University of Illinois, Urbana, Illinois.

The Landscape Aide, A Suggested Training Program, U.S. Department of Health, Education, and Welfare, Office of Education, Division of Vocational & Technical Education, U.S. Government Printing Office, Washington, D. C., 1964.

The Training Need for Selected Farm Related Occupations in Four Counties in Oklahoma, Richardson, B.B. and Edington, E.D., Bulletin #2, Research Series #2, Agricultural Education Department, Oklahoma State University, Stillwater, Oklahoma, mimeo.

Training Required by Workers in Agricultural Business and Industry, Sutherland, S. S., and Thompson, O.E., California State Department of Education, 1957.

What Agribusiness Means to Dallas, Moore, Donald S., Texas, Agricultural Extension Service, College Station, Texas, 1962.

Work Experience Education, A Handbook for Students and Parents, Spence, N.R., Modesto City Schools, Modesto, California.